Pliny the Elder: Themes and Contexts

Edited by

ROY K. GIBSON & RUTH MORELLO

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Pliny the Elder:
Themes and Contexts

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EDITORS' PREFACE

Pliny's *Naturalis Historia*—a brilliant and sophisticated encyclopaedia of the scientific, artistic, philosophical, botanical and zoological riches of the world of the first century AD—has had, as one of our own contributors has recently put it, 'a long career in the footnotes' of historical studies (broadly understood), a phenomenon born of the sense that the work—as an encyclopaedia—was there to consult, or to 'use', as a resource to aid investigation of specific technical issues or passages, of *Quellenforschung*, or of carefully delimited topic areas ('the history of art', 'metallurgy in the ancient world'). However, inspired in great part by John Healy's impassioned advocacy of Pliny as an 'interdisciplinary writer' (and even linguistic innovator) who should be seen in the broader context of traditions of technical and philosophical inquiry in the ancient world,[1] a new generation of critics has begun to try to 'read' this monumental text, and—by examining the dominant motifs which give shape and order to the *HN*—to construct frameworks within which we may understand and interpret Pliny's overarching agenda.

Pliny's work, of course, is hospitable both to readers who wish to 'consult' the text and to those who intend to 'read' it, as his prefatory remarks about the value of his table of contents (Book 1 of the *HN*) reveal. His evidence will not soon lose its value for historians of ancient culture, science, or art history, and the essays in a stimulating recent edited collection on Pliny—published since the conference which gave rise to the present volume—set the irresistible intricacies of detail in Pliny's text against the background of contemporary Roman culture.[2]

Nevertheless, although Pliny is pragmatic about the many different types of readers he might attract, he does articulate a holistic approach to his subject matter, announcing in his preface that his book is about 'nature, that is life' (*HN* pref. 13), and some of the most influential studies of recent years, especially those of Mary Beagon, have taken him at his word and focused on his distinctive and all-embracing view of the natural world, and of mankind's place in it.[3] Other approaches, including that of

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[1] Healy (1999).
[2] Bispham and Rowe (eds.) (2007).
[3] Beagon (1992); Beagon (2005).

Sorcha Carey, have taken well-established Plinian topics, in Carey's case the history of art, and set about re-considering the material within the wider context of the encyclopaedia as a whole.[4] Carey also re-interprets Pliny's history of art (and, by extension, the *HN* as a whole) as 'a catalogue of Roman empire', an approach partly shared in 2002 by Valérie Naas's study, *Le projet encyclopédique de Pline l'ancien*, and further developed in 2004 by Trevor Murphy's monograph on *Pliny the Elder's Natural History: the Empire in the Encyclopaedia*. In the process of these reconsiderations of Pliny and of the Plinian agenda, all these scholars have begun to think more about Pliny's genre itself, and about what it means to be a reader of an encyclopaedia, a subject most recently studied in detail by Aude Doody (2010), *Pliny's Encyclopaedia. The Reception of the Natural History*. The present collection seeks to explore the applications (and implications) of these themes further, and to advocate a view of Pliny as a serious (and in many respects even radically innovative) commentator upon the world around him.

Our collection has its origin in a conference held at the University of Manchester in June 2006, where—in collaboration with our colleague Mary Beagon—we brought together leading Pliny scholars from several countries, including France, Italy, Ireland, the USA, and Great Britain, in order to explore wider contexts for this polymathic author, to take Pliny's monumental text as more than the sum of its parts, and to assess the broader implications of this unusual work. This volume includes a selection of revised papers from that conference, plus some newly commissioned papers on key aspects of Pliny and the reception of his work.

We begin with two discussions of Pliny's approach to war and imperialism. Rhiannon Ash examines four aspects of Pliny's representation of warfare: the use of war as a chronological structuring device in the text, the utility of warfare in facilitating research into the world and its wonders, its potential for the corruption of mankind and its value as a metaphor for describing the activity of the natural world. Andy Fear then opens up the discussion by considering more specifically Pliny's 'imperialism', suggesting that Pliny's own experience of 'barbarism' leads him to emphasise the cultural and beneficent aspect of imperialism (unlike the later Tacitus), and to view Rome's civilising mission in ways that possess strong parallels with the pronouncements of 19th-century

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4 Carey (2003). Cf. for a similar approach, Jacob Isager (1991).

apologists for British imperialism. Thereafter, Eugenia Lao focuses on a topic closely associated with imperialist ideologies, namely exotic luxury goods, their consumption and the dissemination of knowledge about them. She argues that Pliny's interest in luxury goods is not motivated simply by a desire to voice criticism, but rather 'by a desire to demonstrate financial ethics and to produce such ethical behavior among the lapsed members of society'. To this end Pliny disseminates practical information about prices and the purchase of such goods in an attempt to force a financial code on consumers (although this approach is ultimately not without problems for Pliny's own project of serving up the domain of knowledge as antidote to that of luxury). Valérie Naas then looks more directly at the deep connections between empire and the conquest of knowledge, and examines the ideological implications of Pliny's interest in *mirabilia* and the relation between the wonders he describes and the praise of empire. Far from being an objective inventory of nature, the *Naturalis Historia* is an inventory of the resources and the wonders put under the control of the Roman Empire. Yet, as Naas goes on to show, *mirabilia* also possess the ability to offer a critique of imperialism. Mary Beagon homes in on the question of *what* Pliny encourages his readers to wonder at. She argues that Pliny, although essentially Stoic in outlook, advocates 'terrestrial curiosity' as against the contemplation of the heavens or of philosophy which was traditionally regarded as a more appropriate channel for intellectual curiosity (as by Seneca). In Pliny's view, an emphasis on the physical world, even in its more mundane aspects, and a proper recognition of the power and importance of physical vision stimulates the mind and forces men to 'rouse themselves from a complacent torpor and look again' at the world around them, creating a self-regenerating cycle of wonder which engages the emotions and encourages further research. The role of philosophy in underpinning the motivations, structure and scope of the *Naturalis Historia* is the subject of Ernesto Paparazzo's paper, in which he argues for Pliny's full awareness of the relationship between science and philosophy in his project, and his debt to Stoic and Posidonian traditions. Aude Doody's paper brings this part of the collection to a close by looking at one of the most persistent features of the *Naturalis Historia*: the naming of animals, plants and minerals. Noting that Pliny seems caught between a desire to preserve and pass on specific information (including names) and a fear that casual readers will be bored by an excess of such information, she sets out to answer the question whether 'names have different significance for the reader who browses, as opposed to the reader who consults the

Naturalis Historia for a specific fact? At what level do names remain words in the text rather than things that can be identified in the world outside the encyclopaedia?' But there is also an aesthetics of naming at work: 'For readers who, like Pliny, are concerned with words as well as things, names can function as invitations to knowledge, sometimes as marvels in their own right'.

Thereafter, we turn our focus to the literary traditions within which Pliny sets his enterprise, and ultimately to Pliny's early reception. In both areas contributors focus on or return repeatedly to the letter which prefaces Pliny's work. First, two papers consider the importance of the literary references within the Preface for the interpretation of the *Naturalis Historia*. Cynthia Damon investigates Pliny's reference to Apion, whose name is included as the rhetorical finale in Pliny's important discussion of his predecessors' choices in book titles, and asks how we can recover the title of Apion's work which is, ironically, represented in Pliny's preface only by *aliqua* ('some works'). In proposing that a title can be recovered from underneath *aliqua*, Damon insists that she 'will be delighted if we henceforth hold Pliny to a higher standard'. Ruth Morello then looks more widely at Pliny's literary references and allusions in the Preface, and argues that Pliny's competitive engagement with such unexpected models as Catullus' *nugae* not only announces a totalizing, encyclopaedic approach to the process of composition, but also signposts a shift from the epistolary frivolity of his handling of his imperial addressee towards the more serious reality of the *Naturalis Historia* within a grand historical and rhetorical tradition. His debt to historiography and rhetoric is then taken up by Clemence Schultze, who looks at the range of the allusions and exemplary anecdotes he includes in his work and argues that 'exemplarity' in Pliny has a specific and appropriate function in augmenting 'the encyclopaedia's comprehensive coverage of matter, species and space by relating human beings to the totality of nature within the additional dimension of time'.

The collection ends with two papers on the early reception of the *Naturalis Historia* and the traditions which soon grew up around the figure of its author. Roy Gibson considers the impact of Pliny's work on his nephew's letters and argues for subtle but thoroughgoing engagement with the *Naturalis Historia* throughout the letters. His paper then moves on to specific consideration of *Ep.* 3.5, an account by the Younger Pliny of the Elder Pliny's publications and working patterns, and considers the significance of the Younger's changes to the order of his uncle's output, whereby in his letter the *Naturalis Historia* is now awarded the final (and

crowning) position in his uncle's literary career—in clear contradiction of the epistolary Preface to the encyclopaedia, where the Elder Pliny had himself awarded his works of Flavian history (to be published after his death) the position of end-point and crown to his career. Finally, Michael Reeve examines the *Vita Plinii*, the short but nevertheless influential 'life' of Pliny which prefaces numerous manuscripts and early printed editions of the *Naturalis Historia*, and which has traditionally been ascribed ultimately to Suetonius. Reeve examines issues relating to the authenticity of the transmitted text, and offers the first new critical edition of the text since the editions of Roth (1858) and Reifferscheid (1860).

For financial, editorial and other support and assistance the editors wish to offer warm thanks to the Department of Classics and Ancient History of the University of Manchester, the School of Arts Histories and Cultures of the University of Manchester, the Roman Society, the Classical Association, and Irene van Rossum and Caroline van Erp at Brill. Particular thanks are owed to John Henderson for his continued and highly valued support of our Manchester conferences and projects in very many ways.

Above all, this book is for John Healy, who attended our conference in 2006 and whose monumental and groundbreaking study of Pliny stands to remind a new generation now at work on the *Naturalis Historia* of the standards which they must strive to match.

The tardiness of the two editors in producing this volume would not have impressed Pliny, who offered the excuse *homines enim sumus et occupati officiis subsciuisque temporibus ista curamus* in the preface to his great work, not as an apology for the late appearance of the *Naturalis Historia*, but as an explanation for its potential omission of relevant facts. Most papers were submitted by their authors in 2008. No systematic updating of contributions has been possible since then.

There exists no international standard convention for referring either to Pliny (Pliny, the elder Pliny, Pliny the Elder, etc.) or to his encyclopaedia (*Naturalis Historia, Historia Naturalis, Natural History*, etc.). We have not attempted to impose uniformity on our contributors in this respect. (Where 'Pliny' alone is used, it is usually clear from the context to which of the two Plinii reference is being made.)

RKG, RM
Manchester, May / November 2010

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CHAPTER ONE

PLINY THE ELDER'S ATTITUDE TO WARFARE

Rhiannon Ash

Introduction

Although the vast *Natural History*, published in 77,[1] was the product of a peaceful era, military service had certainly played a central rôle in Pliny the Elder's life. He himself had served in both Lower and Upper Germany under some prestigious commanders, Domitius Corbulo and Pompeius Secundus, and on the Rhine, he had apparently enjoyed *castrense contubernium*, 'companionship of the camp' (*HN* pref. 3) with the young Titus, now emperor.[2] Despite having a windpipe that was, his nephew says (Pliny *Ep*. 6.16.19), weak and often inflamed, Pliny still commanded the fleet at Misenum, the post that he held when he was famously killed aged 55 during Vesuvius' eruption.[3] Any views he expresses in the *Natural History* about warfare, therefore, are articulated by a man with practical experience in that sphere.

Moreover, even if the precise details of Pliny's actual career in Germany have prompted scholarly debate, we can clearly see his calculated efforts to embrace the persona of a military man in the *Natural History*'s preface. When he quotes (in a modified way) from Catullus' opening poem, calling the poet his *conterraneus*, 'fellow-countryman' (*HN* pref. 1),[4]

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[1] See Baldwin (1995) for the date of composition.

[2] Syme (1958) 60–62, Healy (1999) 5–7, and Beagon (2005) 2–5 discuss Pliny's career. The dating of his service in Germany is controversial, but the consensus is that he had 'three tours of duty, in which he campaigned against (a) the Chauci (AD 47), under Domitius Corbulo, (b) the Chatti (AD 50), in Upper Germany during the governorship of Pomponius Secundus, and (c), in Lower Germany, as a colleague of the future emperor Titus' (Healy (1999) 5). See also Malloch (2005) for the date of Corbulo's first campaign in Lower Germany. We do have an inscription (*CIL* XIII.10026.2) from a horse-trapping referring to Pliny as equestrian *praefectus* and linking him to Xanten (Vetera).

[3] *erat Miseni classemque imperio praesens regebat* (Pliny *Ep*. 6.16.4). On the Vesuvius letters, see Berry (2008), also Gibson in this volume.

[4] On the preface, see Howe (1985) and Morello in this volume. Pliny's quotation of Catullus 1.3–4 playfully casts himself as the poet (the massive *Natural History* is far from being a *libellus*!) and Titus as Catullus' addressee, Cornelius Nepos, who is cited by Pliny as a source; cf. Gibson in this volume on the same nexus of relationships.

Pliny quickly follows up this tag by jovially reminding Titus that he will of course recognise this *castrense uerbum*, 'military slang' (*HN* pref. 1), even if we ourselves do not. Pliny here proudly accentuates his own military heritage, and in turn compliments Titus, whose successes as a general in Jerusalem were widely known (and indeed much more recent and prominent than Pliny's own military exploits). We can perhaps see in Pliny's soldierly camaraderie an attempt to cash in on Titus' military reputation for his own advantage.[5] He certainly seems keen to establish his military credentials from the start. In that connection, it is worth commenting on the syntax at the opening of the preface: the first long and sprawling sentence (running from *libros* down to *uelles* at the end of section three) is sustained to an extraordinary degree by multiple periphrases and paratactic clauses in apposition.[6] Could this rhetorical strategy be a self-conscious effort to cast himself as the stereotypical gruff soldier? Soldiers were supposed to be notoriously unconcerned with elegant Latin, in that they were far too busy fighting to polish their rhetorical skills, so Pliny duly obliges (however disingenuously) with a syntactically shambolic opening.[7]

We can see too that Pliny has robustly bolstered his military identity through the choices made during his earlier literary career. From the nephew's letter about his uncle Pliny's works, we know that his 'opening salvo' was a technical treatise *de iaculatione equestri*, 'about throwing a javelin from horseback' (*Ep.* 3.5.3).[8] The nature of literary debuts is usually expressive, and Pliny, who wrote this piece while commanding a cavalry unit, clearly aimed to corroborate his authority as an *auctor* by his practical experience as an *actor*, a man of action in the field. This endorsement recalls Sallust's politically shrewd Marius, who explosively berates generals sprung from the nobility for learning their craft from books:

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[5] Murphy (2004) 61 sees the dedication to Titus as one of a 'chain of transactions', also featuring Pliny's meticulous citation of his sources.

[6] For a discussion of Pliny's style in the body of the work, see Healy (1999) 79–99.

[7] On the traditionally gruff speech of a military man, see *Rhet. Her.* 4.65, Liv. 2.56.8, 4.41.1, 10.24.4, Quint. 11.1.33, and Tac. *Hist.* 4.73.1. Cicero stresses that generals need to have practical experience, whatever their theoretical understanding of the profession (*Off.* 1.18.60). Lucian reminisces about an unnamed historian who wrote a bare record of events, 'pedestrian and ordinary, such as a soldier … might have written' (*Hist. Conscr.* 16).

[8] Pliny himself refers to this work, which contained a description of the ideal horse from which to throw javelins (*HN* 8.162). Tacitus perhaps used it as a source at *Germ.* 6.2. On the Younger Pliny's account of the Elder's literary career, see Gibson in this volume.

quae illi litteris, ea ego militando didici, 'What they have learned from books, I have learned from active service' (Sall. *Iug.* 85.13). Personal experience also drove Pliny's next work, his biography of Pomponius Secundus, legate of Upper Germany: Tacitus records Secundus' victory over the Chatti in AD 50, for which he won triumphal ornaments, but calls this *modica pars famae eius apud posteros*, 'a moderate component of his reputation with posterity' (*Ann.* 12.28). That fame was largely based on the glory of his poems.[9] Perhaps Pliny used his own memories of serving with his friend Secundus to redress the balance, dove-tailing his sophisticated activities as a poet with more practical accounts of his military achievements. It is interesting in this respect that Pliny records one distinctive habit of this *consularis poeta*: he habitually refrained from belching (*HN* 7.80). If this detail also featured in Pliny's biography, we can perhaps imagine here a discussion of Secundus' attributes as a commander, who successfully earned the common soldiers' respect without sinking to their level. That was a mistake made by the short-lived emperor Vitellius, who regularly belched to engender camaraderie with his men (Suet. *Vit.* 7.3). If this speculation is right, then Secundus resembled Pliny's dedicatee, Titus, who fraternised with his men, but *incorrupto ducis honore* (Tac. *Hist.* 5.1.1). Pliny also wrote twenty books of *Bella Germaniae* (Pliny *Ep.* 3.5.4), which he started while serving in Germany.[10] Although warfare is an intrinsic part of historiography, it can dominate a work to a greater or lesser degree, but Pliny's account of the German wars clearly places warfare at the centre of the narrative. No doubt it also featured in his continuation of the history of Aufidius Bassus in thirty-one books and made authoritative (but problematic) by personal experience.[11] It covered some or all of Nero's principate, the civil wars, and at least some

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[9] *OCD*[3] 'Pomponius (*RE* 103, Supp. 14) Secundus, Publius [?Calv]isius Sabinus'; Quint. 8.3.31, 10.1.98, Plin. *HN* 13.83, 14.56, Tac. *Ann.* 5.8, 11.13, 12.28. On his victory over the Chatti, see Levick (1990) 154.

[10] Marincola (1997) suggests that 'it began with Rome's wars with the Cimbri and the Teutones in the first century BC, and culminated with Drusus' wars in AD 4–7', although Syme (1958) 288–289 plausibly posits a later end-point, with the narrative going as far as AD 47, the recall of Domitius Corbulo from the Rhine by Claudius. For there are two surviving references to the *Bella Germaniae* (Suet. *Calig.* 8.1–2, Tac. *Ann.* 1.69.2, both referring to Germanicus' campaigns at the start of Tiberius' principate). See further Sallmann (1984) and Rives (1999) 36–37.

[11] Pliny judiciously postponed publishing this historical narrative, a *temporum nostrorum historia*, until after his death (*HN* pref. 20), since the contemporary focus exposed him to charges of fostering *ambitio*.

of Vespasian's principate, probably culminating in the Jewish triumph of AD 71.[12] Pliny's literary interests were not exclusively military, as we can see from his other works, the *Studiosi* about an orator's training, and the *Dubius Sermo*, incorporating philological investigation, but many of his publications before the *Natural History* were clearly driven by a military agenda.[13]

So, over the years, Pliny had actively sought to make the military element a distinctive part of his literary legacy. Yet this construction of an authorial identity involves a striking paradox. For as Pliny rigorously assembled the material for his *Natural History* over the AD 70s, the contemporary scene shows signs that attitudes to warfare were changing, only natural perhaps after the ugly civil wars that had brought the Flavian dynasty to power. So, the Jewish war, the most important foreign campaign of Vespasian's principate, had been formally concluded with the famous triumph in Rome in June AD 71 (Joseph. *BJ* 7.121), even if in practice the fortress of Masada was to hold out for a few more years.[14] Moreover, in AD 75, Vespasian dedicated the Temple of Peace, a beautiful monument designed to draw a line under the self-destructive civil wars (Joseph. *BJ* 7.159–162).[15] Former Flavian generals had either been put out to pasture, such as Antonius Primus, or were writing pointedly non-military works, such as Mucianus' *Mirabilia*.[16] The emperor himself, albeit an archetypal military man (Tac. *Hist.* 2.5), was now busily engineering the *pax orbis terrarum Augusta* (as his coinage testifies). Even Pliny himself would die not in battle, but during a chaotic natural disaster.

[12] The end-point of Aufidius Bassus' history is contentious, but it perhaps began in 8 BC (continuing Livy) and ended in AD 47 with the *Ludi Saeculares* of that year, celebrating the 800th anniversary of Rome (Syme (1958) 697–699, Marincola (1997) 292 n. 7). Tacitus cites Pliny for a detail about who sacked Cremona in AD 69 (*Hist.* 3.28), while Pliny the Younger says that it was written *religiossisime* (*Ep.* 5.8.5). Its scale, with more than a year per book, was huge. Writing in 77, Pliny the Elder says that it was *iam pridem peracta* (*HN* pref. 20).

[13] Quintilian later compliments Pliny for his work on oratory (3.1.21), although Pliny claims that contemporaries had criticised his work in this area (*HN* pref. 28). Quintilian cites Pliny for a detail about the comportment of an orator (11.3.148).

[14] Murphy (2004) 114 notes that in the *Natural History* Pliny 'circumspectly avoids mention of the Jewish war, of politics, or even of the Jews'.

[15] Darwall-Smith (1996) 35–74 and Levick (1999) 126–127 discuss the Temple of Peace.

[16] Ash (2007) discusses the parameters and nature of this work.

Given this wider cultural and political context, it seems salient to consider Pliny's attitude to warfare in the *Natural History*. After all, here we have an author who has made warfare the very cornerstone of his literary career (whatever his real experiences in the field), but his final work, a vast celebration of the natural world and all its resources, is tricky to reconcile with what came before. In representing warfare in the *Natural History* then, is Pliny self-consciously turning his back on his previous scholarly efforts to embrace the peaceful spirit of the new Flavian era? Or is he in some sense reinforcing warfare's central position in the Roman world, continuing and developing his main area of interest in his previous literary works? Or does his monumental work reflect both change and continuity? As Mary Beagon says, the *Natural History* is 'a microcosmic reflection of the Roman world of the first century AD',[17] but we need to ask what place warfare now has in this world, so different after the civil wars of AD 68–69. This paper will argue that in the *Natural History*, Pliny goes on the offensive, acknowledging and celebrating the advantages of an era of peace, but at the same time reinforcing warfare's contribution over the centuries to Rome's current prosperity and global domination. This is not to say that his stance conflicts with the prevailing imperial ideology (quite the opposite): indeed, Vespasian and Titus were successful generals, who would have been interested in military affairs, which feature ubiquitously in the *Natural History*. In this paper, the rôle of warfare will be considered from four distinct angles. We will explore first, the pervasive way in which it is embedded in the narrative as a chronological marker; second, the fringe benefits of warfare through technological advances and other discoveries; third, its negative impact when conducted for the wrong reasons or by the wrong people; and finally, its ubiquitous presence in Pliny's representation of the natural world (both practically and metaphorically).

Warfare as a Chronological Marker

One pervasive and formal way in which Pliny embeds warfare in the *Natural History* is by his chronological markers. So, he regularly dates incidents by locating them as taking place during a particular war. This he does either with an ablative clause (such as *bello Siculo*, *HN* 7.178) or,

[17] Beagon (2005) 5. Cf. Murphy (2004) 2 'a book patterned after the vast empire that has made the universe available for knowing'.

if he wants to be more exact, with a temporal ablative plus prepositional phrase (e.g. *undecim annis ante tertium Punicum bellum*, *HN* 10.139 = 161 BC). Yet such dating can be peculiarly unhelpful: it is all very well to say that Palamedes added four letters to the Greek alphabet 'during the Trojan war' (*Troiano bello*, *HN* 7.192),[18] but that is hardly an exact date and could be said to supply only the illusion of a solid chronological anchor.[19] Many chronological formulae only date an incident broadly, and in some cases, Pliny even has to add a gloss to help readers who may be hazy on the dates of a particular war. So he says that Democritus and Hippocrates flourished *circa Peloponnesiacum Graeciae bellum quod gestum est a trecentesimo urbis nostrae anno*, 'about the time of the Peloponnesian war of Greece, which was waged from the 300th year of our city' (*HN* 30.10). This is an ungainly indication of chronology, but Pliny's laborious efforts here to include the *bellum* formula (despite its clunky nature) show how important it was to him.

What is going on here? Pliny's dating by *bella* may simply reflect the chronological systems used by his annalistic sources (particularly those of the second century BC such as Cato the Elder). So, Laura Cotta Ramosino suggests that Pliny's evocative neo-Catonian emphasis (in this and other respects) dove-tails well with the contemporary political ideology of Vespasian's principate, deftly counteracting the philhellenism associated with Nero's rule.[20] That is no doubt true, but in addition, Pliny's regular use of the *bellum* formula insistently reinforces warfare's central position in the collective Roman identity, constantly keeping it visible throughout the narrative. If the distribution of the *bellum* formula is examined more closely, several points become clear:[21] first,

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[18] In Tacitus' digression on the evolution of writing, Palamedes also features, but with an even broader chronological marker: *temporibus Troianis* (*Ann.* 11.14.2).

[19] Even if, as Feeney (2007) 82 reminds us, Eratosthenes had fixed the fall of Troy in 1184 / 3 BC, which became the dominant date in the tradition, the war itself covered an elusive chronological span (despite its reassuringly neat ten year duration in Homer). See Plut. *Cam.* 19 for efforts to pin down the exact day on which Troy fell, with discussion in Grafton and Swerdlow (1986).

[20] Ramosino (2004) 65–67.

[21] The *bellum* formula features as a chronological marker in the *Natural History* as follows (variations in case and word-order are not indicated in the numerical totals): (a) *bello Punico* (1st, 2nd, or 3rd): 16 times, (b) *bello Troiano*: 10 times, *bello Iliaco*: 2 times, (c) *bello ciuili*: 11 times, (d) *bello Marsico*: 5 times, (e) *bello piratico*: 5 times, (f) *bello sociali*: 5 times, (g) *Pyrrhi bello*: 4 times, (h) *Cimbricis bellis*: 3 times, (i) *Persei bellum* / *Persicum bellum*: 3 times, (j) *Mithridatico bello*: 3 times, (k) *bello Siculo*: 2 times, (l) *bella Persarum*: 2 times, (m) *Iugurthinum bellum*: 2 times, (n) *Peloponnesiacum bellum*: 2 times, (o) *bello*

the most ubiquitous references are to the three Punic wars (a natural reflection perhaps of the central place in Roman history of this long conflict), second, Greek wars are far less prominent, with only the Trojan, Peloponnesian and Persian wars featuring, and third, Roman republican wars predominate at the expense of more recent imperial conflicts. This pattern suggests a Pliny who is as nostalgic as he is patriotic. Even when he introduces the humiliating republican civil wars, he implicitly celebrates Rome's powers of survival, accentuates the desirability of the present imperial system, so conducive to stability, and contrasts past and present to stress the benefits of the *pax Romana* for the natural world.[22]

Warfare and Progress

Warfare is therefore woven into the *Natural History*'s fabric through individual conflicts used as chronological markers. However, another pervasive characteristic of warfare in Pliny's narrative transcends this focus on individual conflicts. This is the potential for military personnel to facilitate technological, geographical and cultural discoveries, advancing the boundaries of collective knowledge for the greater good.[23] This highly beneficial by-product of warfare often casts generals and soldiers (incongruously perhaps) as cutting-edge researchers. So, the Roman general Suetonius Paulinus, the first to cross the Atlas mountains and survey the terrain on the other side,[24] claims that (*HN* 5.14):

> imas radices densis altisque repletas siluis incognito genere arborum, proceritatem spectabilem esse enodi nitore, frondes cupressi similes praeterquam grauitate odoris, tenui eas obduci lanugine, quibus addita arte posse quales e bombyce uestes confici.

Samniti / Samnitio bello: 2 times, (p) *bello Actiaci*: once, (q) *bello ciuili Sullano*: once, (r) *bello Numantino*: once, (s) *Pannonicis bellis*: once, (t) *Antoniano bello*: once, (u) *Pharsalico bello*: once, (v) *bello propter Tiridaten gesto*: once, (w) *Bedriacensibus bellis ciuilibus*: once, (x) *bello, quod cum Oeensibus gessere initiis Vespasiani imperatoris*: once.

[22] Pliny effusively celebrates the benefits of the *pax Romana* at *HN* 27.3. A point related to Pliny's use of the *bellum* formula is his tendency to embed references to Roman triumphs 'in the citations of the zoological, botanical, and geographical books of the *Natural History*' (Murphy (2004) 160).

[23] The corollary of this positive aspect is the idea of warfare undertaken in pursuit of luxury goods: so, Arabian wealth prompted Caligula to want to invade Arabia (*HN* 12.56).

[24] Cf. Domitius Corbulo, a source of Pliny's information about the Caspian Gates, gleaned during the general's eastern expeditions (*HN* 5.83, 6.40), Aelius Gallus on Arabia (*HN* 6.160) and Publius Petronius on Ethiopia (*HN* 6.181).

> the foot of the range is filled with dense, tall forests of trees which are of an unknown variety: they are conspicuously tall with glossy timber free from knots, and the leaves are like those of the cypress, apart from its heavy scent, and covered with delicate down, from which (if skill is applied) clothing like that made from the silk-worm can be obtained.

Paulinus not only maps a part of the world so far unknown to the Romans, but also discovers a useful natural resource in the process.[25] The fact that Pliny describes him as the *primus Romanorum ducum* to cross the Atlas mountains evokes the agonistic milieu of military conflicts—we can compare here, for example, military crowns awarded for being first to breach an enemy town's defences—but he reapplies the notion to the natural world. It is almost as if the mountains are an enemy city, forming a barrier ripe for a practical Roman military leader to surmount.[26] Similar images recur in Curtius Rufus' *Historia Alexandri Magni*, where Alexander successfully pits his wits against increasingly formidable natural obstacles, or Lucan's *Bellum Ciuile*, where Caesar effortlessly confronts a storm at sea.

It is not just the military elite, the generals, that Pliny romanticises as natural scientists, but common soldiers too, especially Alexander the Great's men, who make the following observations about underwater vegetation in the east (*HN* 13.140):

> qui nauigauere ⟨ex⟩ Indo Alexandri milites frondem marinarum arborum tradidere in aqua uiridem fuisse, exemptam sole protinus in salem arescentem, iuncos quoque lapideos perquam similes ueris per litora, et in alto quasdam arbusculas colore bubuli cornus ramosas et cacuminibus rubentes, cum tractarentur, uitri modo fragiles, in igni autem ut ferrum inardescentes, restinctis colore suo redeunte.

> The soldiers of Alexander who sailed from India related that the foliage of underwater trees, which had been green in the water, dried up in the sun after being removed and straightaway turned into salt, also that along the coast there were rushes of stone which absolutely resembled real ones, and that out at sea there were certain shrubs the colour of cow-horn, with branched extremities and red at the top; when these were handled, they

[25] Military exploration can also eliminate areas as a potential source of natural bounty. So, some praetorians sent by Nero to explore the area around Meroe in Egypt report back that it was only desert (*HN* 6.181). Pliny notes how unusual it is for non-military explorers to make geographical discoveries: *sine bellis quae ceteras omnis terras inuenere* (*HN* 5.51). On geographical discoveries by the Roman military, see Nicolet (1991a) 85–88.

[26] Murphy (2004) 148–154 discusses Pliny's representation of mountains (particularly in antithesis to rivers, with which they constantly fight: *HN* 36.1).

> were as fragile as glass, but they hardened like iron in the fire, although their own colour returned once they had cooled down.

This peculiar local vegetation is curious rather than utilitarian, but here the common soldiers, not Alexander himself, investigate its qualities.[27] Elsewhere, Pliny even puts Alexander's men on a par with Aristotle for a point about the extraordinary fertility of the mouse (*sub auctore Aristotele et Alexandri Magni militibus*, *HN* 10.185). So, the potential for discoveries under military auspices overseas is peculiarly egalitarian: a *gregarius miles* has equal scope for success as a grand general such as Paulinus. This inclusiveness is also reflected in the names given to certain places, such as *Fabaria*, 'bean-island' (*HN* 4.97) in Jutland, so named by practical Romans for the abundant wild beans found growing there. Warfare clearly is not always about fighting: there was plenty of time to kill on campaign, allowing scope for other activities. So, Pliny wrote his treatise about throwing the javelin from horseback in the field, and Quintus Cicero composed four tragedies in sixteen days while campaigning in Gaul (Cic. *Q.Fr.* 3.6.7). Battle was only a small part of Roman soldiers' responsibilities in the provinces: a nice illustration of this involves the legionaries sent to the Balearics to help the locals, who had desperately petitioned Augustus after being overwhelmed by an explosion in the rabbit population (*HN* 8.218). The image of tough troops hunting down bunnies is delightfully incongruous, but underscores the wider contribution to be made by the Roman army in contexts other than conquest and battle.

Even when warfare does not directly expand knowledge, its spoils can still be used to do this. So, Asinius Pollio's library at Rome is *prima in orbe … ex manubiis publicata*, 'the first in the world established from the spoils of war' (*HN* 7.115). Sometimes these spoils offer an even more valuable resource: human talent, such as Ennius, *spolium ex tertia orbis parte raptum*, 'spoil captured from the third part of the world' (*HN* 7.114). Elsewhere, the Romans appropriate an individual's intellectual legacy. So Pompey defeats Mithridates of Pontus and acquires the king's invaluable collection of medical treatises (*HN* 25.7):

> Pompeius autem omni praeda regia potitus transferre ea sermone nostro libertum suum Lenaeum grammaticae artis iussit uitaeque ita profuit non minus quam reipublicae uictoria illa.

[27] Cf. the *Iaxartes* river, *quod Scythae Silim uocant*, *Alexander militesque eius Tanain putauere esse* (6.49).

> Pompey, however, having gained possession of all the royal booty, ordered his freedman Lenaeus, a skilled philologist, to translate them into Latin, and so, that victory enhanced quality of life no less than the state.

Such discoveries add a humanitarian element to warfare, alleviating what could otherwise be a brutal activity by playing up fringe benefits.[28] Medical advances through warfare interest Pliny elsewhere too, as when he highlights the *lactoris* plant (also known as the *militaris*): *quoniam uulnus ferro factum nullum non intra dies quinque sanat ex oleo inposita*, 'since there is no wound inflicted by iron which it does not cure within five days if it is applied in oil' (*HN* 24.168).[29] There is also a military context for a story about discovering a cure for rabies, when the mother of a soldier serving in Spain dreams that she should send her son wild rose root, to be taken in a drink. The soldier, bitten by a dog, just starts to show symptoms of rabies, when his mother's letter arrives, enabling him to be saved by the wild rose concoction (*HN* 25.17). Although this serendipitous cure does not make military service the direct mechanism for the medical discovery (engineered by the mother's dream), nevertheless the intervention of what Pliny calls a *deus* suggests that the gods benignly watch over Roman soldiers serving abroad, which endorses their activities. Elsewhere, Pliny introduces the martial element in medical advances by suggestive juxtaposition, as when he says that the art of medicine was hidden in the darkest night *usque ad Peloponnesiacum bellum* (*HN* 29.4) when Hippocrates restored it to the light. That marker implies that the war itself played a role in the process.[30] Of course, Pliny's stance on this topic reflects contemporary reality, as Ralph Jackson summarises: 'At the same time as knowledge and techniques were disseminated, fresh

[28] Even the encyclopaedic genre itself (and the *Natural History* as its latest and finest embodiment) can be seen as 'an intellectual component of the spoils of war' (Murphy (2004) 195).

[29] Pliny highlights the traffic of medicinal plants across the world as a particularly striking benefit of the *pax Romana* (*HN* 27.2–3).

[30] Pliny acknowledges that warfare can make people creative, even if they are not personally involved in the fighting. He comments on the rich meteorological studies that were produced *inter bella praesertim*, 'especially amidst wars', but laments that *nunc uero pace tam festa, tam gaudente prouentu litterarum artiumque principe, omnino nihil addisci noua inquisitione*, 'now indeed during such a happy time of peace under an emperor who so delights in the production of literature and the arts, nothing at all is being learnt in addition by new research' (*HN* 2.117). For Pliny, peacetime can apparently generate dangerous intellectual atrophy.

information was collected and new resources exploited, constantly adding to the existing medical and pharmaceutical corpus'.[31]

Warfare naturally opened up resources in many different areas. So, it introduced pistachio nuts to Spain (*HN* 15.91) and a new mode of ploughing north of the Po (*HN* 18.182). Pliny even forgives the Gauls for invading Italy, understandably tempted over the Alps by the alluring Italian oil and wine (*HN* 12.5).[32] Warfare plays an aesthetic rôle too, as an inspiration for artists: so Augustus had displayed in his forum paintings of *Bellum* and *Triumphus* personified (*HN* 35.27), and the artist Theorus painted pictures of the Trojan war in a series of tableaux for the colonnade of Philippus (probably built by Marcius Philippus, consul in 38 BC, rather than by his father) in Rome (*HN* 35.144).[33] More practically, Pliny also documents the inventors of various weapons (*HN* 7.200–202), a dubious creativity perhaps, but central to human activity: we should notice here that although the inventors come from diverse geographical areas, no discovery of a weapon is attributed directly to the Romans, despite the rich potential for laying claim to Roman advances in military science. We see the same phenomenon in the survey of naval discoveries (*HN* 7.206–209). Romans are represented as inheriting this technology from the Greeks and others, and Pliny does not trumpet their own contributions to the field. Instead, more peaceful activities, such as shaving and sundials, see the focus on Rome being introduced.

Warfare as a Negative Force

Pliny certainly makes a convincing case for the benefits of warfare, but he is not an uncritical proselytiser for military activity. Julius Caesar, for example, faces harsh criticism (*HN* 7.92):

> nam praeter ciuiles uictorias undeciens cent⟨ena⟩ et nonaginta duo milia hominum occisa proeliis ab eo non equidem in gloria posuerim, tantam etiam coactam humani generis iniuriam, quod ita esse confessus est ipse bellorum ciuilium stragem non prodendo.[34]

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[31] See Jackson (1988) 137, 112–137 in general on the medical contingent in the Roman army.

[32] This familiar story features elsewhere (Dion. Hal. *Ant. Rom.* 13.10–11, Livy 5.33.2, Plut. *Cam.* 15). See further Williams (2001) 102–109.

[33] Cf. the *Iliacas ex ordine pugnas* on Juno's temple in Carthage (Verg. *Aen.*1.456). See Erskine (2001) 59, 70–74, 79–83 on the Trojan war represented in public, monumental art.

[34] As Beagon (2005) 278 reminds us, Caesar included casualty figures for at least some

> For if we put aside his victories in civil war, I would certainly not class it as glorious that 1,192,000 people were killed by him in battles, a great detriment to the human race even if it was forced upon him, as he himself admitted it to be by not publicising the carnage of the civil wars.

Pliny's criticism of the slaughter enacted by *all* Caesar's wars is striking, especially because we might have expected him to celebrate the foreign campaigns in Gaul and Britain.[35] For Pliny, loss of life on this scale is a reason for shame, not celebration, even if he pulls his punch by conceding that this slaughter may have been forced on Caesar. At the same time, Pliny can step back and analyse why wars are so prevalent in human history. In a passage outlining how far water encroaches on available land, he reflects that despite the world's size, the territory fit for human habitation is really quite small (*HN* 2.174):[36]

> haec est materia gloriae nostrae, haec sedes, hic honores gerimus, hic exercemus imperia, hic opes cupimus, hic tumultuamur humanum genus, hic instauramus bella etiam ciuilia mutuisque caedibus laxiorem facimus terram!

> This is the material for our glory, this is our domain, here we win honours, here we exercise power, here we covet wealth, here we throw the human race into chaos, here we launch even civil wars and make the land more spacious by killing each other!

This passage, marked by striking anaphora and asyndeton, is quite progressive, especially given the traditional importance attached by Romans to acquiring new lands as a route to glory. Caesar's slaughter of all those people now seems like part of an ongoing, inevitable process, and coheres with a timeless element of the human condition. Wars happen because there is not enough territory to go around, so the same areas have to serve again and again as a means for the ambitious to acquire glory. On this basis, war is inescapable, for the Romans as much as anyone else. Its potential for disastrously diminishing the population is acknowledged by Pliny elsewhere, as with the Marsi *attenuata bellis*, 'thinned by wars'

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of the civil wars (e.g. 15,000 killed at Pharsalus, Caes. *B Civ.* 3.99.4) in his commentaries, but she suggests that what Pliny has in mind is the practice of 'flaunting such figures officially, e.g. in triumphs'.

[35] Conte (1994) 68 refers to Pliny's 'numerical *furor*', here paradoxically indicated by his inability to specify the number who died in the *civil* wars.

[36] Some people, such as the Chauci, still inhabit an indeterminate area between land and sea (*HN* 16.1–4), but their life is clearly so miserable that it only underscores the desirability of proper terrain in comparison.

(*HN* 5.17), the Greek towns Arethusa, Larisa and Chalcis, *deleta uariis bellis*, 'destroyed by various wars' (*HN* 6.159), and Ethiopia *Aegyptiorum bellis attrita*, 'worn down by wars with the Egyptians' (*HN* 6.182). That said, people can still behave commendably or disgracefully, even in civil wars. So, Pliny reserves special vitriol for the unnamed freedmen who *sanguine Quiritium et proscriptionum licentia ditatos*, 'were enriched by the bloodshed of Roman citizens and the licence of the proscriptions' (*HN* 35.200)[37] and he sarcastically berates Sulla's inappropriate *cognomen* (*Felix*), 'a title obviously derived from slaughtering his fellow-citizens and attacking his country!' (*HN* 7.137).

We can see how far Pliny compartmentalises in representing warfare, an understandable necessity perhaps within the encyclopaedic genre, but a noteworthy methodological phenomenon nonetheless.[38] Pliny emphasises the benefits of military activity for humans, but he is also prepared stridently to denounce mankind's innately corrupt nature in this sphere. Two cases are especially striking. In the first, Pliny acknowledges that warfare is an intrinsic part of the natural world, but then explodes at mankind's peculiar malice in harnessing and generating poisons to make already fatal weapons even more deadly: *nec ab ullo praeter hominem ueneno pugnatur alieno. fateamur ergo culpam ne iis quidem quae nascuntur contenti*, 'Man is the only creature to fight with poison taken from another. Let us therefore confess our guilt, since we are not even content with the resources which occur naturally' (*HN* 18.3–4). Fighting with poison is a technique associated earlier with the Scythians (*HN* 11.279), but here the first-person plural (*fateamur*) suggests an all inclusive blame. So too does the fact that in a second passage, Pliny offers a universalising argument. In discussing iron, he attributes to it the best part of life (agriculture) and the worst (*HN* 34.138):

[37] Greed as a trigger for civil war features elsewhere. Pliny, discussing silver dishes weighing 100 pounds which existed in Rome shortly before the Sullan civil war, relates how *erubescant annales, qui bellum ciuile illud talibus uitiis imputauere; nostra aetas fortior fuit*, 'The annals of history, which have attributed that civil war to vices such as these, may blush; but our era has trumped this' (*HN* 33.145). Lucretius 5.1412–1435 also blames mankind's acquisitiveness for generating wars.

[38] Murphy (2004) 9 'The *Natural History* was less written than it was assembled, and as a consequence of this a unitary authorial voice is present only at intervals'. This observation potentially has important methodological consequences for this paper, but it also leaves open the possibility that some topics (e.g. warfare) more than others allow room for Pliny's unifying presence.

> sed eodem ad bella, caedes, latrocinia, non comminus solum, sed etiam missili uolucrique, nunc tormentis excusso, nunc lacertis, nunc uero pinnato, quam sceleratissimam humani ingenii fraudem arbitror, siquidem, ut ocius mors perueniret ad hominem, alitem illam fecimus pinnasque ferro dedimus. quam ob rem culpa eius non naturae fiat accepta.
>
> … but likewise we use iron for wars, slaughter, robberies, not just at close quarters, but also as a winged missile, now projected from catapults, now from our arms, now indeed adorned with feathers, which I regard as the most wicked trick of human creativity, since in order that death may reach a man more quickly, we have made iron fly and given it wings. Accordingly, we should take the blame for this and not pin it on nature.

These arrows may lack poison, but Pliny still finds them reprehensively destructive, a testament to mankind's warped creativity.[39] His position here is complex: throughout his narrative, Pliny clearly appreciates how far knowledge gleaned over the centuries from military expansion serves the *Natural History*'s encyclopaedic agenda, but at the same time, he acknowledges that warfare is an ugly and shameful business. Perhaps Pliny just deploys a moralising topos for immediate narrative impact, but then again, we should remember that he came from Novum Comum in northern Italy, uncomfortably close to the two recent civil war battles around Cremona, the city destroyed by Antonius Primus' victorious Flavian forces. This may prompt us to ask whether the *Natural History* preserves any signs of autopsy, reflections of Pliny's own experiences as a general. There are some instances: he saw a radiance shining from the javelins of soldiers on sentry duty at night (*HN* 2.101), he describes how the medicinal plant Britannica was pointed out to the legionaries by the Frisians (*HN* 25.21), and regarding the plant Daphnis' cassia, he says *extremoque margine imperii, qua Rhenus adluit, uidi in aluearii apium satam*, 'I saw it on the extreme edge of the empire, where the Rhine laps the frontier, planted amongst the beehives' (*HN* 12.98). He also describes the technique for painting ships and seems to show a level of technical knowledge perhaps reflecting his naval appointment at Misenum (*HN* 35.49).[40] Yet beyond this, Pliny apparently did not draw extensively from

[39] Cf. *HN* 7.201, where either Scythes or Perses is said to invent the bow and arrow. In ancient literature fighting with a bow and arrow is often represented as cowardly (e.g. Homer's archers, Paris and Pandarus).

[40] Pliny's account of the Chauci (*HN* 16.1–4) shows direct personal experience of the tribe; he also displays first-hand knowledge of amber, goose-down cushions and Germans' use of auroch-hides and horns (*HN* 37.42, 10.53, 11.126).

his own military career to furnish the narrative with examples: material from books was his preferred source.[41]

Warfare in Nature

Any discussion of this topic would be incomplete without acknowledging how deeply Pliny embeds warfare in his depiction of the natural world (both practically and metaphorically). Humans fight each other, but so too do the animals and the elements in what Pliny calls the *rerum naturae pugna secum*, 'the battle of natural elements with themselves' (*HN* 2.102).[42] Every animal has its natural enemy, which Pliny formulates as a general rule in discussing the hostility between the basilisk and the weasel: *adeo naturae nihil placuit esse sine pare*, 'so nature has decided that nothing is without its match' (*HN* 8.79).[43] The *locus classicus* for the concept is the detailed list of paired creatures who engage either in wars (*HN* 10.203–206) or friendships (*HN* 10.207–208).[44] This catalogue is reinforced cumulatively by more extensive examples in the narrative, where anthropomorphised creatures have metaphorical 'armour' and fight 'wars' with their own distinctive 'battle strategies' to exploit the natural weaknesses of their 'enemies'.[45] Two examples illustrate this tendency to embed warfare in the representation of anthropomorphised creatures. The first involves bees (*HN* 11.58):

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[41] Murphy (2004) 4 'The science of the *Natural History* is much more a product of literary tradition than direct observation' (also 52–54 on literary tradition *versus* empirical research).

[42] This polemical situation mirrors the prevailing state of warring elements before the creation when *corpore in uno | frigida pugnabant calidis, umentia siccis | mollia cum duris, sine pondere habentia pondus*, 'in one body cold elements were fighting with hot, dry elements with wet, soft elements with hard, and weightless elements with heavy' (Ov. *Met*. 1.18–20).

[43] Beagon (1992) 153–156 and Murphy (2004) 151 discuss the amphitheatrical resonances of such language.

[44] The notion is reinforced subsequently and applied even to inanimate entities: *pax secum in his aut bellum naturae dicetur, odia amicitiaque rerum surdarum ac sensu carentium*, 'In these chapters instances of nature at peace or at war with herself will be narrated, and the hatreds and friendship of entities which are deaf and lack senses' (*HN* 20.1).

[45] Inanimate features can also be described in such terms. So, the river Po benignly claims no plunder for itself: *nihil tamen ex rapto sibi uindicans* (*HN* 3.118). Beagon (1992) 199–200 analyses Pliny's description of the Taurus mountains, whose progress has been defined by battles with the Euphrates (*HN* 5.84) and the aggressive assaults of

> quod si defecit aliquas aluos cibus, *impetum* in proximas *faciunt rapinae proposito*. at illae *contra derigunt aciem* et, si *custos* adsit, alterutra pars, quae sibi fauere sensit, non adpetit eum. ex aliis quoque saepe *dimicant* causis *duasque acies contrarias duosque imperatores instruunt*, maxime rixa in conuehendis floribus exserta et *suos* quibusque euocantibus, *quae dimicatio* iniectu pulueris aut fumo tota discutitur, reconciliatur uero lacte uel aqua mulsa.
>
> However, if food is lacking for some hives, they attack their neighbours for the purpose of plunder. Yet those bees form a battle-line to face them, and if the guard [i.e. beekeeper] is at hand, whichever side thinks that he favours them does not attack him. They often fight too for other reasons and draw up two opposing lines and two commanders, the greatest trouble arising while they are gathering flowers, as each side calls out its forces. This combat can be completely broken up by throwing on dust or by smoke, and a reconciliation can be brought about by some milk or water sweetened with honey

Pliny here offers a miniaturised version of Virgil's famous mock-heroic description of bee warfare at *Georgics* 4.67–87, borrowing specific motifs, such as throwing dust to terminate the conflict (*pulueris exigui iactu, G.* 4.87), but there are also important differences.[46] Whereas Virgil attributes the battle to an antagonistic *discordia* between two rival kings (*G.* 4.68), Pliny eliminates such troubling undercurrents of civil war and favours a less dubious reason for fighting, namely lack of food, or else competition for flowers. These bees fight from hunger, not because they are playing out some microcosm of civil war.[47] Warfare still forms part of the bees' world, but in the *Natural History* it is an understandable phenomenon, and Pliny fundamentally regards the bee as a *munificum animal* (*HN* 11.67). We do see the odd example of creatures fighting for morally dubious reasons, such as the griffins, always battling the one-eyed Arimaspi over gold in the mines, *mira cupiditate* (*HN* 7.10) on both sides, but such cases are rare; and in this instance, the corrupting presence of wild humans is significant.

The second example of warfare embedded in the animal world involves the *ichneumon*, or mongoose, the natural enemy of both the snake and the crocodile (*HN* 8.88):

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the seas (*HN* 5.97–98). The language recalls the battle narratives of ancient historiography and epic.

[46] Virgil himself was inspired by Varro *Rust.* 3.16.29–31, although he develops much more elaborately the metaphor of battle.

[47] Pliny elsewhere uses the image of civil war in the context of the animal world, as in the *bellum interneciuum* (*HN* 10.24) waged between the nighthawk and the eagle.

notum est animal hac gloria maxime, in eadem natum Aegypto. mergit se limo saepius siccatque sole, mox ubi pluribus eodem modo se coriis *loricauit*, *in dimicationem pergit*. in ea caudam attollens ictus inritos auersus excipit, donec obliquo capite speculatus inuadat in fauces.

This animal, likewise born in Egypt, is particularly known for this glorious deed. It sinks itself repeatedly in the mud and dries itself in the sun. Then when it has in this way provided itself with a corselet of several layers, it proceeds to battle. In this it raises its tail and renders the blows useless by turning away, until after watching for its moment, with its head at an angle, it attacks its opponent's jaws.

Pliny celebrates the mongoose's inventive creation of a corselet from mud and highlights its capacity both to endure an attack and to strike its dangerous opponent at just the right moment, thereby prompting us to admire the creature. If we compare his version with an earlier passage about the *ichneumon* in Nicander, it becomes clear that Pliny has played up the mongoose's heroic qualities (Nic. *Ther.* 200–208):

ἀλλ' ὅταν Αἰγύπτοιο παρὰ θρυόεντας ἰαμνους
ἀσπίσι μῶλον ἔχωσιν ἀθέσφατον εἱλικοέσσαις
αὐτιχ' ὁ μὲν ποταμόνδε καθήλατο, τύψε δὲ κώλοις
τάρταρον ἰλυόεσσαν, ἄφαρ δ'ἐφορύξατο γυῖα
πηλῷ, ἀλινδηθεὶς ὀλίγον δέμας εἰσόκε λάχνην
Σείριος ἀζήνῃ τεύξῃ δ'ἄγναπτον ὀδόντι.
τῆμος δ'ἠὲ κάρην λιχμήρεος ἑρπηστᾶο
σμερδαλέην ἔβρυξεν ἐπάλμενος ἠὲ καὶ οὐρῆς
ἁρπάξας βρυόεντος ἔσω ποταμοῖο κύλισεν.

But when amid Egypt's rush-grown water-meadows they join with the wriggling asps in a fearsome struggle, forthwith the *ichneumon* leaps into the river, strikes the slimy bottom with its paws, and rolling its small body smears its limbs at once with the mud, against the time when the Dog-Star's heat has dried its fur and made it so that no fang may rend it. And then it either springs upon the frightful head of the reptile with flickering tongue and bites it, or seizing it by the tail, sends it rolling into the weedy river.

Nicander's version has the mongoose create its protective corselet with relative ease (as opposed to the multiple times that Pliny's creature has to jump in the mud). In addition, Nicander's mongoose picks off the enemy easily, hardly even engaging in a fight. In contrast, Pliny emphasises the exemplary bravery and *gloria* of the mongoose in attacking the snake, particularly since that creature, with its propensity to use poison as a weapon, is thoroughly dishonourable. Where the mongoose fights openly, the snake lurks in the earth and all varieties have an *exitiale uirus*, 'deadly poison' (*HN* 8.85). These sharply contrasted combat techniques

evoke the idealised contrast between Roman openness and the devious fighting techniques of foreigners. We can compare here the passage from Tacitus' *Annals*, where Tiberius responds to an offer to remove Arminius by poison: *responsumque esse non fraude nec occultis, sed palam et armatum populum Romanum hostes suos ulcisci*, 'The reply was that the Roman people took vengeance on their enemies not by trickery or concealment, but openly and armed' (*Ann.* 2.88.1). Of course, in reality Romans were quite capable of fighting deviously, if necessary, as the closing chapters of Sallust's *Jugurtha* remind us, but the ideal involves pitched battles out in the open.

Conclusions

The examples from Pliny's *Natural History* discussed in this paper illustrate his view that conflict is endemic in the natural world and that humans are just as susceptible. Their intelligence may allow them to deploy more elaborate techniques in fighting their enemies, but the imperative to fight can be seen to link them fundamentally with the animals. Yet if Pliny regards warfare as embedded in the cycle of human life, his narrative demonstrates that conflict can be conducted across a broad moral spectrum: wars motivated by greed for power (particularly civil wars) nestle alongside stabilising wars which enrich collective knowledge in areas such as medicine. Indeed, his archetypal ideal commander nostalgically evokes the spirit of Cato the Elder, and fuses the rôles of general and farmer (*HN* 18.19):

> ipsorum tunc manibus imperatorum colebantur agri, ut fas est credere, gaudente terra uomere laureato et triumphali aratore, siue illi eadem cura semina tractabant qua bella eadem diligentia arua disponebant qua castra, siue honestis manibus omnia laetius proueniunt quoniam et curiosius fiunt.
>
> The fields were cultivated then by the hands of the generals themselves, as is right to believe, with the earth rejoicing at a laurel-decked ploughshare and a tiller who had celebrated a triumph—perhaps those farmers handled the seeds with the same care as they managed their wars and marked out their fields with the same diligence as they arranged the camp, or perhaps everything turns out better in the hands of honourable men, since the work is done with greater care.

Pliny does not embed a straightforward manifesto for war in his *Natural History*, but he does make a strong case that warfare must be conducted correctly by responsible generals and hard-working soldiers. Selflessness

and simplicity are the ideal: for Pliny, soldiers should not be adorned with silver (*HN* 33.152), and the most valuable reward for a military man is the simple grass crown (*corona graminea*, *HN* 20.6–11). In eulogising Italy, *rectrix parensque mundi altera*, 'the ruler and second mother of the world' (*HN* 37.201) at the work's finale,[48] Pliny lays out the country's main resources (*HN* 37.201):

> uiris feminis, *ducibus militibus*, seruitiis, artium praestantia, ingeniorum claritatibus, iam situ ac salubritate caeli atque temperie, accessu cunctarum gentium facili, portuosis litoribus, benigno uentorum afflatu.
>
> with her men and women, generals and soldiers, slaves, excellence in arts, bright talents, also her location and healthy temperate climate, her easy access to all peoples, shores with ports, her kindly blowing winds.

High up this list come the *duces* and *milites*, who have been allocated an integral part in the celebration of his bountiful homeland. The benefits of Vespasian's newly instituted *pax Romana* rest on solid military foundations, but war is cyclical and endemic, so Rome's army must remain at the ready. In essence, we can read the *Natural History*, written by a military man, as a work for its time, celebrating the current stability, inspiring the Flavians and the legionaries to feel proud of their achievements in bringing about this *status quo*, but also reminding them of the need for vigilance. The delicate equilibrium of this bountiful world could always be thrown out of kilter, and nobody would be more aware of this than Pliny's first generation of readers, who had lived through the civil wars of AD 68–69. That military metaphor of keeping watch used in Pliny's memorable assertion, *uita uigilia est* (*HN*, pref. 18), apparently has a broader relevance than its immediate context suggests.

[48] Murphy (2004) acknowledges the limitations of this passage, calling it (33) 'a perfunctory gesture in the direction of closure'. Pliny was perhaps inspired by Virgil's *laudes Italiae* (*G.* 2.136–176) or by Vitruvius' description of Italy (6.1).

CHAPTER TWO

THE ROMAN'S BURDEN

Andrew Fear

As Gibbon once famously remarked, the surprising thing about the Roman Empire is not its fall, but rather its remarkable longevity.[1] This very durability may well have led to the comparative silence that we find in our contemporary sources concerning the nature and intentions of Roman Imperialism as those living under the Empire in the main simply took Roman rule for granted: it was assumed to be an unchanging and unchangeable constant of their lives and as such no more worthy of comment than the weather.[2]

This dearth of ancient evidence understandably has in turn led to prolonged debates both about the motivation that led Rome to obtain her Empire and her consequent attitude towards her possessions once they had been obtained. It is perhaps inevitable that, with a lack of Roman material, these discussions have always been heavily influenced by contemporary attitudes to imperialism. This is certainly true of the present where a highly critical, indeed self-flagellating, view of 19th and 20th European Imperialism, known as 'post-colonialism' has come to exert a strong influence over thinking about the Roman Empire.[3]

Whether Rome can be said to have had an 'Imperial ideology' or even 'policy' is debatable.[4] This, however, in no way makes the Roman Empire exceptional; many later Empires, notably the British Empire, had no governing ideology *per se*. Nevertheless, it remains possible to discern underlying dispositions towards imperial possessions and these do provide valuable insights into the way empires were managed by their respective rulers.

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[1] Gibbon (1782) ch. 38 pt. 6, 'The story of its ruin is simple and obvious; and instead of inquiring *why* the Roman empire was destroyed, we should rather be surprised that it had subsisted so long'. On Pliny and imperialism, see also Lao and Naas in this volume.

[2] See *mutatis mutandis* the comments of Gomme (1945) 1–25.

[3] A recent example of the post-colonial approach is Mattingley (2006). A more balanced appraisal of the province is perhaps provided by de la Bédoyère (2006). The best response to the post-colonial approach remains Chapman (1979). The debate is not a modern one; it was pursued with vigour in 16th century Spain, see Lupher (2006) ch. 2.

[4] Millar (1977) provides a salutary, if extreme, warning about the dangers of seeing 'policy' at work in the Roman world.

Under the influence of modern ideology, a common position taken towards the Roman empire is that, at best, Rome was indifferent to the nature of her subjects' lives and that often Roman rule was actively harmful to provincials and knowingly so. Yet much of the evidence used to generate this position is deeply flawed and, perhaps, also in part anachronistic. In constructing this version of imperialism, much stress is placed on the poets of the Augustan age who emphasise the glory of imperial conquest to the exclusion of other factors which may have been present in Rome's imperial vision. A *locus classicus* of this attitude is the sixth book of the *Aeneid*, where Anchises famously declares that his posterity will have no great claims to the high arts (Verg. *Aen*. 6.847–850):

> excudent alii spirantia mollius aera
> (credo equidem), uiuos ducent de marmore uultus,
> orabunt causas melius, caelique meatus
> describent radio et surgentia sidera dicent:

> Others, I believe, will mould more softly living bronze, draw living faces from marble, plead cases better, describe the motions of heaven and discuss the rising of the stars

Indeed, Virgil's deployment of the adverb *mollius* with its potential overtones of excessive effeminacy, when describing the practice of the high arts, may imply that the poet regarded, or thought his readership would regard, such a lack as no bad thing. Instead, Anchises charges Rome to 'impose the habit of peace' on the world: that is to say conquer other nations who are 'proud' enough to resist Roman rule (Verg. *Aen*. 6.851–853):

> tu regere imperio populos, Romane, memento
> hae tibi erunt artes, pacique imponere morem
> parcere subiectis et debellare superbos.

> You, Roman, be mindful to rule beneath your sway the peoples of the world: this is your art and to impose the habit of peace, sparing those you have conquered and defeating the arrogant in war.

A similar viewpoint is taken by Horace in his *Odes* and by various other contemporary poets.[5]

But to base arguments on Roman attitudes to empire on such sources is an approach which is laden with problems. First, we must query strongly whether the views of a small coterie of poets accurately reflect the views of

[5] This material is usefully collated by Brunt (1963).

the bulk of the Roman population or even of its ruling class—an assumption that is all too often uncritically made. A counter to such scepticism would be to assert that as these poets were in the main state-sponsored, their production would indeed reflect official policy. However, this too is overly simplistic. We cannot be certain that the message sent out from such writers, even if they were imperially sanctioned, truly reflected the policies of Augustus, a skilful manipulator of public opinion, rather than being either a way of gratifying aspirations the emperor held while knowing that they were impossible to effect, or a ploy to placate a bellicose public while other policies were in fact being pursued.

Poetry is a poor source for historians at the best of times, and the times of the Augustan poets are worse than most. The early years of Augustus's reign, from which most of these poems date, are the least important for the study of the developed imperialism of the Principate. Augustus's reign saw the Roman empire still in the process of transformation and a new system of running the provinces being put into place.[6] The poets of Augustus's reign reflect more accurately their recent past than their present, or the Roman Imperial future. That future was a long one and it is not legitimate to assume that attitudes expressed at the beginning of the period, even if they do reflect the general attitude of society at that time, will be a useful guide to later views about managing the empire. The Roman Empire was an evolving structure and any approach to its running needs to take account of this fact.

In contrast to this material, the Elder Pliny, writing towards the end of the first century AD, provides us with one of the few contemporary accounts of Roman imperialism from the period of the fully developed empire. Pliny therefore provides a far more reliable insight into Roman imperial aims than the Augustan poets, yet his vision of Imperialism has been badly neglected by modern scholarship, perhaps because his work at first sight seems an unlikely place to find thoughts on the theory of imperialism, but perhaps also because it jars strongly with the 'post-colonial' current which runs through much modern writing on the subject.

Unsurprisingly, Pliny has no formal quarrel with Virgil. He too rejoices in conquest by Rome and the glory that it brings to his people, but unlike Virgil and the other Augustan poets mentioned above, Pliny is not interested solely in these aspects of Imperialism. On arriving at Italy

[6] See Tac. *Ann.*1.2 for the important contrast between the republican system of governing the provinces and the new system established by Augustus.

in his survey of the world in books 3–4 of the *Natural History*, Pliny's praise of his native land includes not only its own virtues, but also the claim that Italy has been set apart by the will of the Gods to unite the world. At first this would seem nothing more than a re-iteration of the 'glory of conquest' theme we find in Virgil and Horace, but Pliny makes it clear that this conquest is but a means to a greater end—the civilising of mankind (*HN* 3.39):

> nec ignoro ingrati ac segnis animi existimari posse merito, si obiter atque in transcursu ad hunc modum dicatur terra omnium terrarum alumna eadem et parens, numine deum electa quae caelum ipsum clarius faceret, sparsa congregaret imperia ritusque molliret et tot populorum discordes ferasque linguas sermonis commercio contraheret ad conloquia et humanitatem homini daret breuiterque una cunctarum gentium in toto orbe patria fieret.
>
> Nor am I unaware that I would rightly be considered an ingrate and idle if I were to describe in this casual and cursory fashion the land which is both the nursling and parent of all lands and chosen by the divine inspiration of the gods to make heaven itself more brilliant, to draw together the scattered empires, to civilise customs, to gather together in a common language the dissonant and wild tongues of so many different peoples, to give civilisation to mankind, and, in short, to become the sole homeland of all peoples over all the earth.

Here Pliny presents the Roman Empire as an active force for moral good: a power which unites mankind, no doubt through conquest, but which also civilises the world by introducing a common language and by moderating savage behaviour. In his comments on the purpose of Empire, Pliny uses the verb *mollire* in a strikingly different and far more positive way ('to civilise') from the manner in which Virgil deployed the cognate adjective *mollis* ('soft, effete') in Anchises' speech in the *Aeneid*. For Pliny the end, and intended, product, of empire is the spreading of *humanitas* across the empire. His words echo those of his colonial successor, Lord Curzon, who saw the British Empire as a 'pre-ordained dispensation intended [by Providence] to be a source of strength and discipline to ourselves, and of moral and material blessing to others' and while being a 'key to glory and wealth', also, and, as importantly, a 'call to duty and the means of service to mankind'.[7]

[7] Curzon (1908) 149. Pliny's evocation of the Gods is also echoed in Curzon's assertion that imperialism was a 'secular religion embodying the most sacred duty of the present' (Curzon (1908) 142; cf. Carnarvon (1878)).

While imperialism is manifestly not the subject matter of the *Natural History*, the topic is important enough for Pliny to return to it on several occasions. His musings are not set apart as a separate topic in the work, but are rather found as asides while he deals with other matters. This parenthetic approach makes his comments all the more valuable to the historian, as they reveal assumptions about the empire which Pliny believed would be shared and accepted as uncontroversial by his readership and thus suggest that these were the views of the majority of the educated elite of his day.

The most extensive of these *excursus* is found at the beginning of book 27 of the *Natural Histories*, a book concerned with herbs. Here Pliny begins by praising the fecundity and variety of plants to be found in the world and then draws his reader's attention to the way that the Roman empire has provided unity in this diversity (*HN* 27.2–3):

> Scythicam herbam a Maeotis paludibus et Euphorbeam e monte Atlante ultraque Herculis columnas ex ipso rerum naturae defectu, parte alia Britannica, ex oceani insulis extra terras positis itemque Aethiopidem ab exusto sideribus axe, alias praeterea aliunde ultro citroque humanae saluti in toto orbe portari, inmensa Romanae pacis maiestate non homines modo diuersis inter se terris gentibusque, uerum etiam montes et excedentia in nubes iuga partusque eorum et herbas quoque inuicem ostentante! aeternum, quaeso, deorum sit munus istud! adeo Romanos uelut alteram lucem dedisse rebus humanis uidentur

> To think that the Scythian herb comes from the Maeotian marshes, Euphorbia from Mount Atlas outside the Pillars of Hercules, where Nature herself begins to come to an end, and that from another part comes Britannica from islands set in the ocean beyond the continental land mass, and in the same way comes Aethiopis, from parts scorched by the stars, and that other plants come from all parts of the world for the benefit of mankind. *And this happens because of the boundless grandeur of the Peace established by Rome* which reveals in turn not merely men and their different lands and tribes, but also mountain ranges which rise above the clouds, their offspring, and their plants. I pray that this gift of the gods will last forever, for they seem to have given the Romans to mankind to be as it were a second sun.

Here far from the notion of Roman indifferentism or outright malignity that we find assumed by modern scholarship, we find again that this contemporary practitioner of Roman imperialism sees the Empire as a universal good—a 'gift of the gods' for 'mankind'. For Pliny the world has been designed by providence so that Nature would benefit mankind,[8]

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[8] See Beagon (1992) 37.

and here we see that it is the Roman Empire which allows Nature to fulfil her *telos* by allowing her diversity to become united and thence be enjoyed and exploited to the full. Again, the contrast with Virgil is instructive. In the first book of the *Aeneid*, Jupiter grants the Romans 'Empire without end', a notion which parallels in part Pliny's majestic Roman peace discussed here. But for the poet the context is one of pure jingoism—the only glory in his poem is for Rome.[9] Pliny, on the other hand, sees the empire as a universal, not a parochial boon. The gathering of nature's bounty is for the *salus humana*, the well-being of mankind, not merely a *salus Romana*. For Pliny the point of the empire is not that a united world should yield up tribute to Rome, but rather that Rome should export *salus humana* to the world. Pliny therefore presents the Roman Empire in much the same terms as the imperialists of the nineteenth century represented their own endeavours. Kipling outlined a moral 'White Man's burden' and Pliny would have both recognised and assented to this version of the Imperial dream.

Pliny's vision of empire as an active force for expanding civilisation can be seen as the product of two parts of his character. The first is his support for the philosophy of Stoicism with its insistence on the unity of mankind. Stoicism was by far the most popular philosophical system in the Imperial period. A strict adherence to its doctrines could lead to an insistence upon the triviality of political endeavours *sub specie aeternitatis*, a view we see expressed by Seneca in his *Natural Questions*.[10] However, Pliny, like many Romans sympathetic to Stoicism, could happily synthesise his philosophy with his patriotism and must have been tempted to see the Roman Empire as the physical instantiation of the unity of mankind upon which Zeno had insisted. In addition to this essential unity of mankind, Stoicism also insisted on the necessity of altruism towards one's fellow man.[11] This too is a doctrine Pliny found highly congenial, as can be seen by his slogan *deus est mortali iuuare mortalem*, 'it is a divine act for a mortal to aid a mortal' (*HN* 2.18): a sentiment again echoed by Seneca *haec diuina potentia est, gregatim ac publice seruare*, 'this is a godlike power, to

[9] *His* [Romanis] *ego nec metas rerum nec tempora pono*; | *imperium sine fine dedi*, 'To them I set no boundaries in space or time, I grant them empire without end' (Verg. *Aen.* 1.278–279).

[10] *Q.Nat.* 3, pref. 9–10. For a full discussion see Hine (2006). For Pliny and Stoicism, see also Beagon and Paparazzo in this volume.

[11] M. Aur. *Med.* 2.1 'We are made for co-operation like the feet, the hands, eyelids, and rows of teeth'.

save lives in the mass and as a public act' (*Clem.* 1.26.5).[12] Pliny immediately links this notion to Rome by insisting that such altruism is part of the *mos maiorum*.[13] For Pliny therefore it was necessarily right for the Empire to further the well-being of her subjects not merely from philosophical theory, but also as a matter of respect to Roman ancestral custom.

These philosophical leanings would also have combined with another part of Pliny's character—his pragmatism. In the preface to his work he is insistent that the point of the *Natural History* is to provide useful information,[14] and, indeed, this commitment to putting altruism into action can be seen in his heroic death in AD 79. It would have seemed natural for Pliny therefore to see the Roman Empire as the means by which his philosophical ends could have been worked out.

Pliny's own personal role as part of the governing structure of the Roman Empire would have reinforced his theoretical views, which were certainly more grounded in actual experience of empire than the various products of the Augustan poets. The sheer size of the *Natural History* and his other literary output means that Pliny's career is often neglected, but he was no retiring scholar and saw extensive active service on the edge of Empire in Germany. His rise to command a cavalry *ala* implies more than average competence in, and his decision to write a monograph on throwing the javelin from horseback, enthusiasm for, his trade.[15] Pliny therefore, unlike Virgil, would have seen 'barbarism' in the raw—and he was revolted by it.

This horror is appositely captured in a passage in the *Natural History* where Pliny discusses the coastal fringes of Germany and the material culture, or lack of it, of the Chauci who live there (*HN* 16.3–4):

> illic, misera gens, tumulos optinent altos aut tribunalia exstructa manibus ad experimenta altissimi aestus, casis ita inpositis nauigantibus similes, cum integant aquae circumdata, naufragis uero, cum recesserint, fugientesque cum mari pisces circa tuguria uenantur. non pecudem his habere, non lacte ali, ut finitimis, ne cum feris quidem dimicare contingit omni procul abacto frutice. ulua et palustri iunco funes nectunt ad praetexenda piscibus retia captumque manibus lutum uentis magis quam sole siccantes terra cibos et rigentia septentrione uiscera sua urunt. potus non nisi ex

[12] I owe this reference to Dr Mary Beagon.

[13] . . . *et haec ad aeternam gloriam uia. hac proceres iere Romani* . . ., 'and this is the road to eternal fame. This was the path our Roman forebears trod . . .' (*HN* 2.18).

[14] *HN* pref. 16. On the 'usefulness' of Pliny's information, cf. Lao in this volume.

[15] Cf. Ash in this volume on the Pliny's military and literary careers.

> imbre seruato scrobibus in uestibulo domus. *et hae gentes, si uincantur hodie a populo Romano, seruire se dicunt!* ita est profecto: multis fortuna parcit in poenam.
>
> There this wretched race live on hummocks or platforms built up by hand above the level of the highest tide they have had and live in their houses there looking like sailors when the tide covers the surrounding land, but more liked those who have been shipwrecked when it recedes. Around their hovels, they catch fish on the ebbing tide. They have no animals nor do they drink milk like their neighbours, they don't even have to struggle with wild beasts since everything that grows is so far away. They weave ropes of sedge and marsh-reeds to make fishing-nets and scoop up mud by hand drying more in the wind than the sun and warm their food and bodies as they freeze in the north wind with soil [ie peat]. *And these are the peoples who, if they are now conquered by Rome say that they have been enslaved!* And indeed they do so! Fortune spares many men to punish them …

Pliny's overwhelmingly negative view of the Chauci contrasts sharply with that of Tacitus, who in his *Germania*, a work which drew heavily upon Pliny's *German History* as one of its key sources, describes the Chauci as the *populus inter Germanos nobilissimus*, 'noblest of the German tribes' (*Germ.* 35), and dwells on their primitive, pristine sense of justice.

Despite this clash, both authors wish to make a similar moral point in their work, namely to warn their readers about the corrupting nature of *luxuria*, a theme which is underlined in both the *Germania* and the *Natural History*. However, the approach of the two authors to the topic is quite different. Tacitus places a high value on *libertas*, which for him is a good in itself and a guarantee of further goods. For Pliny, on the other hand, *libertas* without material advancement is not merely valueless, but a positive hindrance to progress and well-being.

This quarrel means that while Tacitus sees much that is admirable in the freedom-loving Germans whose very freedom is in part a living reproach to his own people, Pliny has a straight-forward incomprehension of German resistance to what he sees as Rome's civilising mission, sarcastically linking the Chauci's opposition to Rome to their backwardness. This mental attitude is also present in the writings of many liberal imperialists of the nineteenth century, such as James Mill, his son J.S. Mill, and Thomas Macaulay, who while entirely sympathetic to the people of India were certain that India could only be civilised by the eradication of her native culture.[16] It would have been impossible for Pliny

[16] See J. Mill (1820), (1826), and also the comments of his son J.S. Mill (1874) 252–253

to have written, or read with comfort, the impassioned denunciation of Roman Imperialism put into the mouth of the Caledonian Calgacus by Tacitus.[17]

This disagreement is likely to have been a product of different personal experiences of the two men. While it has been claimed that Tacitus saw service in Germany, this is unlikely.[18] Tacitus, having never encountered the *Chauci*, found it far easier to fantasise about the noble savage and to deploy this myth for his own ends than it would have been for Pliny who had experienced the Germans at first hand. The tension between the two authors reflects a tension about primitivism which exists in all imperial nations and persists to this day.

Pliny's encounters with barbarism were not confined to Germany, but continued in his later career. His best documented procuratorship was held in North-West Spain: an area where primitive, Celtic habits remained highly tenacious throughout the Roman period, as can be seen, for example, by the almost purely Celtic settlement of Viladonga which dates from the late Roman Empire and is located only 15 miles from the Roman town of Lugo.

Pliny's Spanish experience is likely to lie behind the unusual comment in the *Natural History* that Asturica, modern Astorga in Northern León,

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who draws on the Roman Empire to form part of his argument: 'The Romans were not the most clean-handed of conquerors, yet would it have been better for Gaul and Spain, Numidia and Dacia, never to have formed part of the Roman Empire? To characterize any conduct whatever towards a barbarous people as a violation of the law of nations only shows that he who so speaks has never considered the subject.' Thomas Macaulay was instrumental in establishing an education system in India, but stated in his *Minute on Indian Education* (2nd February, 1835) that he had 'never found one among them [referring to Orientalists] who could deny that a single shelf of a good European library was worth the whole native literature of India and Arabia.'

[17] *Raptores orbis auferre trucidare rapere falsis nominibus imperium, atque ubi solitudinem faciunt, pacem appellant*, 'Despoilers of the world ... to theft, slaughter, and rapine they give the false title of empire and where they make a desert they call that peace' (Tac. *Agr*. 39). Yet even here there is ambivalence. Tacitus may have intended his audience to recoil from the speech for being self-evidently false in their eyes and the fact that the 'crimes' of Rome are given a false title may suggest that to those readers a true *imperium* ought to behave in a more altruistic fashion. The speech is again paralleled by debates in the nineteenth century. Gladstone in his Midlothian campaign of 1879 sounded the following warning against the rising tide of British Imperialism: 'Remember the rights of the savage ... Remember that the happiness of his humble home, remember that the sanctity of life in the hill villages of Afghanistan among the winter snows, is as inviolable in the eye of Almighty God as can be your own'. For this '2nd Midlothian speech' delivered at the Foresters' Hall, Dalkieth, on 26th November 1879, see Gladstone (1879) 94.

[18] This argument is often circular, suggesting that because Tacitus wrote the *Germania*, he ought to have seen service in Germany.

was an *urbs magnifica*, 'magnificent city' (*HN* 3.28). This striking aside is made in one of the numerous city-lists Pliny constructs for the peninsula, but jars with his normal practice for composing these. Normally such lists contain a bald catalogue of cities, with any additional comments limited to notes on the towns' legal status and honorific titles—no further remarks are normally forthcoming. At first sight, therefore, Pliny's aside about Astorga is extremely odd. While it was to expand in the second century, in Pliny's day the town was simply a former legionary fortress: small, walled, and embattled.[19] Pliny's baptism of it as 'magnificent' therefore is doubly odd not merely by its presence, but also through its incongruity with the town's archaeological record.

It could be argued that Pliny's comment is merely one of personal vanity, motivated by a wish to be seen as having served in an important town of the Empire, but this seems unlikely. A far better explanation is to see the epithet as another expression of Pliny's ideological commitment to Rome's civilising mission. The reason for its presence is likely to be Astorga's very existence. Modern archaeology has found no trace of a pre-Roman settlement on the site of the town, suggesting that it was an *ex nihilo* creation. For Pliny it was this in which the town's glory lay: the triumph and magnificence of Asturica was that it was an island of *humanitas* in a sea of barbarism and as such helped to further Rome's civilising mission. One of the surviving inscriptions from Astorga is that of a *grammaticus*. Pliny would have approved.[20]

However, Pliny's *altera lux* of the Roman Empire was not merely a new source of light for the world; it was also morally bound to disperse the darkness of barbarism. As has been noted, Pliny saw an important function of the *imperium Romanum* as bringing *humanitas* to the world through taking a positive role in ameliorating barbarous customs. This in part was through the introduction of new practices. Pliny is particularly keen that the Latin language be propagated in order to help establish the stoic cosmopolis which will unite the world and spread civilisation.

But Pliny also saw it as Rome's duty actively to suppress barbarism. This can be best seen in book 30 of the *Natural History*. Pliny, a staunch rationalist, begins this book with an attack on magic. While most of this attack is in the form of sarcasm and a denunciation of the follies

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[19] For the development of Astorga, see Sevillano Fuertes and Vidal Encinas (2002).

[20] See Diego Santos (1986) no. 103, Lam. LXXXV. Sadly the name of the *grammaticus* is lost.

of believing in such nonsense, sterner measures are also countenanced. When Pliny arrives at Druidism he comments (*HN* 30.13):

> nec satis aestimari potest, quantum Romanis debeatur, qui sustulere monstra, in quibus hominem occidere religiosissimum erat, mandi uero etiam saluberrimum

> It is impossible to calculate the size of the debt owed to the Romans who removed these monstrosities in which the most pious act was to kill a man, and, indeed, the most healthy to be eaten.

These are references to the suppression and outlawing of Druidism in Gaul and Britain. While contemptuous of the beliefs underpinning Druidism, Pliny's true horror is excited by the physical cruelty, above all the human sacrifice, perpetrated by this religion and he therefore regards it as right and proper that Rome has exstirpated it. The impersonal verb used here shows that this is a debt that Pliny believes the world in general, not merely the Celts where Druidism was present, owes to Rome. Again, this attitude is paralleled among later benign imperialists, perhaps the most obvious example being the campaign against the practice of suttee in India spearheaded by Major General Sleeman.[21]

It can be seen therefore that at least one educated member of the Roman elite held strong views on the active role that the Roman Empire could, and should, play in civilising mankind. When looking at the dynamics of the empire as a whole, it is important to determine whether Pliny's sentiments were merely the opinions of one individual or reflect a more general trend amongst his contemporaries.

The popularity of Stoicism as an underpinning philosophy for the Roman upper classes suggests that Pliny's views, especially the modified Stoicism which embraced Roman political supremacy, would have had a wide appeal among Pliny's co-evals. Moreover, Pliny himself does not seem to have been an original thinker, and this, too, implies that his attitudes, and particularly those expressed as asides, are those of the intellectual mainstream of his day. The dedication of the *Natural History* is perhaps also of significance. The work is addressed to the Imperial heir apparent, Titus, whom Pliny may have befriended during his time in Germany. One could see the *Natural History* as a manifesto urging Titus to adopt Pliny's positivist views of empire.[22] But this would be to go too

[21] Sleeman (1893); see also Morris (1975) ch. 2.

[22] Addressing material to the Emperor was a common enough ploy and in itself need not imply any Imperial assent to what is written. This is true of numerous Christian *apologia*. On Titus and the preface to the *Natural History*, see also Morello in this volume.

far. Pliny is not an active advocate for his point of view; rather he simply mentions it in passing, as something beyond dispute, implying that he thought its dedicatee would accept these views as uncontroversially true. Moreover, in book two immediately after Pliny's impassioned plea for altruism as both right and Roman, he immediately notes that the current emperor, Titus's father Vespasian, is performing precisely this role at the time of writing.[23]

It seems therefore that Pliny believed that Vespasian was already on his side in these matters. Nor may this have been delusory on his part. The Flavian era did see a stronger emphasis on education than the preceding Julio-Claudian epoch. The most striking example of this was the establishment of state-funded professors of Greek and Latin rhetoric at Rome.[24] There was also perhaps a stronger concern with the management of provinces,[25] a concern which continued even under the 'bad' emperor Domitian under whom Suetonius grumpily concedes that (*Dom.* 8):

> Magistratibus quoque urbicis prouinciarumque praesidibus coercendis tantum curae adhibuit, ut neque modestiores umquam neque iustiores extiterint; e quibus plerosque post illum reos omnium criminum uidimus.
>
> He took such care to restrain town magistrates and provincial governors that they never behaved in a more reasonable or just fashion—after his rule we have seen most of them guilty of every kind of crime

It is also in precisely this period that we find the most famous of all statements about Romanisation, namely that found in Tacitus's *Agricola*, where we are told that in AD 78 (*Agr.* 21):

> Sequens hiems saluberrimis consiliis absumpta. Namque ut homines dispersi ac rudes eoque in bella faciles quieti et otio per uoluptates adsuescerent, hortari priuatim, adiuuare publice, ut templa fora domos extruerent, laudando promptos, castigando segnis: ita honoris aemulatio pro necessitate erat. Iam uero principum filios liberalibus artibus erudire, et ingenia Britannorum studiis Gallorum anteferre, ut qui modo linguam Romanam abnuebant, eloquentiam concupiscerent. Inde etiam habitus nostri honor

[23] *hac nunc caelesti passu cum liberis suis uadit maximus omnis aeui rector Vespasianus Augustus fessis rebus subueniens*, 'Now that greatest ruler of all time Vespasian Augustus with his sons marches along this path with heaven-ward step bringing aid to our troubled affairs' (*HN* 2.18).

[24] For Flavian attitudes towards education in general, see Marrou (1956), part 3, ch. 8, and Bonner (1977) 157–162.

[25] See, for example, the promulgation of the *Flavian Municipal Law* in the Iberian peninsula and the related republication of colonial charters there; see Gonzalez (1986), Fear (1996) 131–169.

> et frequens toga; paulatimque discessum ad delenimenta uitiorum, porticus et balinea et conuiuiorum elegantiam. Idque apud imperitos humanitas uocabatur, cum pars seruitutis esset
>
> The winter was spent in carrying out salutary measures. For, in order to habituate a population that was scattered and barbarous and so inclined to war to passivity through the charms of luxury, Agricola gave private encouragement and public aid to the building of temples, town-squares and houses, praising those that were eager for these, and reproving the tardy. In this way, a rivalry for honours took the place of compulsion. He similarly provided a liberal education for the chiefs' sons and showed a preference for British talent rather than Gallic graft that those who had until recently despised the tongue of Rome now longed for its eloquence. From that came a taste for our style of dress, and the 'toga' became fashionable. Step by step they were led to things which lead to vice: the lounge, the bath, the elegant banquet. All this in their ignorance they called civilisation, when it was but a part of their enslavement.

The passage mirrors Pliny's attitudes almost exactly, emphasising not only material advancement, but also the value of education and the power of Latin as a medium of promoting civilisation—it is the learning of Latin which leads to a desire for other aspects of Roman culture. Moreover, while it is clear that some Britons are eager to embrace Roman ways from the passage, it is also clear that Agricola gives them a helping hand to do so. Yet despite what could be seen as a form of positive imperialism, Tacitus endeavours to put as bleak as possible an interpretation on Agricola's pursuit of cultural Romanisation, interpreting it as nothing more than a clever policing technique, entirely devoid of concern for the locals' well-being. However, we must be careful not accept his words at face value. In general, Tacitus, a fierce traditionalist, welcomes the Empire and indeed its expansion, but because of his love of *libertas*, he can only see it as an evil for its non-Roman subjects. Hence Agricola's actions have necessarily for him to be interpreted in this dark light, as for Tacitus the empire will bring both loss of liberty and corrupting *luxuria* to Britain.

This negative approach has been taken up in recent years by modern commentators who have also been anxious to downplay Rome's wish to effect cultural change in her provinces. Yet despite Tacitus' rhetoric, what is being described could easily been seen in a more positive light as an attempt to improve the material culture found in early Roman Britain. In fact, Pliny's thoughts on Empire strongly suggest that we should do this and see Agricola as implementing a policy designed as much for the benefit of the Britons as for that of Rome. In his biography Tacitus presents Agricola as the ideal Roman, and the inclusion of this

material implies that his attempts to Romanise Britain were actions that his readers would expect of a good provincial governor position and quite possibly state policy. The dark interpretation of the policy is Tacitus's own way of reconciling material which he had to include in the biography in order to complete his picture of Agricola as the perfect governor to his own personal world-view. Far from furnishing proof that Pliny stood outside the mainstream of Roman thought in his views on the provinces, the *Agricola* suggests strongly that his views were those of the majority of his contemporaries.

To argue that there was an ideology of positive Imperialism at Rome, is not, of course, to deny that 'bottom-up' desires to emulate the ruling power were not a major factor in Romanisation; a glance at the epigraphic record of any province shows that this was the case. Private and imperial benefaction existed side by side and fed upon each other. What could be done by the centre was necessarily limited in a pre-industrial society, though it was not negligible. However, it was the mental atmosphere shown in the *Natural History* and, ironically in the *Agricola*, which is the more important factor. If the Empire had a positive attitude towards the material advancement of the provinces, the potential rewards for private euergetism there would be all the higher, and the temptation to perform such acts all the greater. The centre's attitude tilled the ground where the harvest of private euergetism was reaped. By accepting Pliny's view of the empire as the usual one of his day, it is possible to explain the archaeological record of the empire's development during the principate far more easily than we can by adopting the indifferentist model of imperialism.

It appears that Pliny, therefore, represents an important strand of Roman thought that emphasised a cultural and beneficent aspect to imperialism. By his day such views were firmly in the mainstream of Roman society, being espoused by emperors and those actively involved in administering Roman rule at the edge of Empire. This approach continued into the late Roman period where the notion of Rome's civilising mission was appropriated by Christian apologists such as Augustine and Orosius, whence it has had an important impact on later imperialist thought. It is a voice that deserves to be heard much more than has been the case in recent years.

CHAPTER THREE

LUXURY AND THE CREATION OF A GOOD CONSUMER

Eugenia Lao

It has become increasingly common in Plinian criticism to call the *Natural History* an inventory, and for the most part the analogy has functioned for scholars as an *entrée* to discussing the work's imperialist ideologies.[1] Scholars point out that Pliny's presentation of nature in inventory form reveals the perspective of a conqueror, which sees the material world as filled with items to be catalogued and administered. The main significance of the *Natural History*'s form, it has been thought, lies in the way it alludes to an instrument of government, and therefore to Roman military power.

Use in public administration, however, is only one application of a genre that appeared in ordinary life as a record of possessions. If we think of the inventory just as a document that helped people manage their economic affairs, how we view the significance of the *Natural History*'s form changes. Now, we have a work that asks us to consider its contents as commodities, items that possess financial value. We have a work that represents its contents as part of an exchange economy, where things could be bought, borrowed, given, and sold. To make an inventory's principal attribute its economic status, in other words, is to alter our conceptual frame, so that we become attentive to the work's concern for matters of wealth, and the proper way to behave with it.

Plinian criticism has long recognized the importance of financial themes in the *Natural History*, as can be seen from the extensive attention given to the work's treatment of luxury. We now know a good deal about Pliny's place in Roman moralizing discourse, and we have a sense of how his attitudes to luxury relate to Flavian political culture and interact with other aspects of his thinking.[2] Although the scholarship has made luxury one of the best understood aspects of the *Natural History*, one issue bears more examination. What we know of Pliny's attitudes to

[1] *Inter alios* Naas (2002), *eadem* in this volume, Carey (2003) 39–40, Conte (1994). On Pliny and imperialism more generally, see also Fear in this volume.

[2] Citroni Marchetti (1991), Isager (1991) 223–229, Beagon (1992) 75–79, 190–194.

luxury is currently based on looking at his negative comments. While scholars do recognize that Pliny actively engages with luxury, the points of engagement have not been much studied in their own right. Elsewhere I have looked at how Pliny's rhetoric of luxury includes his awareness of engaging with it, and how this awareness writes an ethical dilemma into the text.[3] I will now consider further implications of Pliny's efforts to deal directly with luxury.

The key to understanding the place of luxury in the thematics of the work, I believe, lies in Wallace-Hadrill's intuition that knowledge about nature, or 'science' as he refers to it, functions as Pliny's antidote to luxury.[4] Wallace-Hadrill makes the persuasive case that the *Natural History* is built upon a tension between the pursuit of knowledge and the love of material consumption. Murphy has further clarified that connection by showing how Pliny thinks of knowledge as a commodity, evident from the financial metaphors used to describe intellectual activities.[5] Knowledge is therefore linked to luxury through their shared status as different types of commodities.

The *Natural History* is a text in which we must perceive the presence of two economies, an economy of reified knowledge and an economy of real goods signified by the text. Financial ideology operates at both levels, driving authorial decisions as well as what Pliny says about material consumption.[6] In this chapter I reconsider the *Natural History*'s dealings with luxury by taking into account the monetized status of knowledge in the text. I suggest that the interest Pliny takes in luxury is motivated by a desire to demonstrate financial ethics and to produce such ethical behavior among the lapsed members of society. His relationship to luxury is not simply a matter of voicing criticism. Rather, Pliny directly involves himself with correcting luxury's false ideology. He does this by sharing practical information about purchasing luxury goods that bears the stamp of his views on proper market behavior—by imposing his financial code on consumers of luxury, in other words. But Pliny may be hoist by his own petard. At the end of the chapter, I look at how luxury has infiltrated the very domain of learning that he tries to serve as antidote, so implicating Pliny in the world from which he tries to distance himself.

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3 See Lao (2008) 23–27.

4 Wallace-Hadrill (1990) 80–96.

5 Murphy (2004) 62–73.

6 Murphy (2003) looks at the ways in which financial ideology drives the composition of the *Natural History*.

Dystopic Visions

It will be helpful to begin by reviewing the passages where Pliny applies economic metaphors to knowledge and intellectual activity, so that we may have a clear idea of how the *Natural History* and its author are presented as functioning within a financial system. Pliny establishes at the outset a strong image of knowledge as property and himself as financial expert. The image first coalesces in the preface when Pliny totals up the facts contained in his work (*HN* pref.17):

> XX rerum dignarum cura—quoniam, ut ait Domitius Piso, thesaurus oportet esse, non libros—lectione uoluminum circiter II, quorum pauca admodum studiosi attingunt propter secretum materiae, ex exquisitis auctoribus centum inclusimus XXXVI uoluminibus ...
>
> 20,000 facts worthy of care—for, as Domitius Piso says, there ought to be treasure-houses, not books—from the culling of about 2,000 volumes, few of which scholars have so far laid hands on because of the material's inaccessibility, from the searching out of 100 authorities, we have locked away in 36 volumes ...

Hunting down (*exquisitis*), collecting (*lectione*), and locking away (*inclusimus*) facts reify pieces of knowledge as rare and precious objects, and intimates that the *Natural History* is one of the treasure-houses that Domitius Piso calls for. Pliny establishes his procuratorial persona by reporting his activities numerically as if he were keeping a financial account.[7] This persona he subsequently sustains and develops in the 'summarium', where he tallies up 'facts, researches, and observations' (*summa: res et historiae et obseruationes*) at the end of each book-summary.[8]

In a slightly different inflection of his procuratorial persona, Pliny compares his night-time reading to checking over account-books (*HN* pref. 22):

> scito enim conferentem auctores me deprehendisse a iuratissimis et proximis ueteres transcriptos ad uerbum neque nominatos .... obnoxii profecto animi et infelicis ingenii est deprehendi in furto malle quam mutuum reddere, cum praesertim sors fiat ex usura.

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[7] If we accept the dating of Syme (1979) 742–773, Pliny would have just completed the last of his three imperial procuratorships in AD 76, a year before the publication of the *Natural History*. Pliny the Younger in *Ep.* 3.5, the biographical portrait of his uncle, reinforces his uncle's self-presentation through much financial imagery.

[8] *medicinae* replaces *res* in the summations for Books 20–33 and 35. For Books 34 and 36 Pliny gives a separate summation of *medicinae*.

> For know that as I was cross-checking, I caught authors, the old ones, made over to the word by the most trustworthy and most recent authors, and not named .... Truly it is characteristic of a servile spirit and a barren mind to prefer to be caught in theft rather than to return a loan, especially since capital is made from the use.

Here Pliny works with a concept of intellectual property similar to modern usage. He casts written knowledge as property belonging to original authors, making borrowers of later authors who incorporate that knowledge in their own works. Giving credit to the old authors means acknowledging their right of ownership, and this act suffices, in the traffic in knowledge, as repayment.[9] As intellectual book-keeper, Pliny is dismayed to find so many accounts giving false report.

The conceptualization of knowledge as a material resource has implications not only for the writer's persona, but also for how we view the issues surrounding the circulation of knowledge. Depending on context and perspective the writer might appear to be a procurator, lender, borrower, or thief. Similarly the traffic in knowledge is seen as following the same ethical codes as those that govern the traffic in real goods. Pliny, having attached the concept of ownership to knowledge, works with ideas of theft and indebtedness to describe what it means for knowledge to be reproduced without acknowledgment.

Pliny continues to use financial ethics to describe the morality of scholarship in the main exposition. An important passage on intellectual avarice represents Pliny's contemporaries as having a habit of keeping their knowledge locked away in their own minds instead of sharing it with the public through writing (*HN* 25.1–2):[10]

> at nos elaborata iis abscondere ac supprimere cupimus et fraudare uitam etiam alienis bonis. ita certe recondunt qui pauca aliqua nouere, inuidentes aliis, et neminem docere in auctoritatem scientiae est.

> But we like to hide away and suppress the knowledge that [the ancients] have worked out, and to cheat life even of strangers' goods. Yes, this is how they hide things away, the people who know a few things, begrudging others, and to teach no one adds to the prestige of their knowledge.

[9] Murphy (2004) 62–66 and (2003) 310–313, construing *usura* as 'interest' (*OLD* s.v. *usura* 2a) rather than as 'use' (*OLD* s.v. *usura* 1), interprets the significance of loan repayment quite differently.

[10] Compare Seneca's differing views: *hoc faciat animus noster: omnia, quibus est adiutus, abscondat, ipsum tantum ostendat, quod effecit*, 'this is what our mind should do: it should hide away everything by which it has been aided, and put on display only what it has made' (*Ep.* 84.7).

The learned men of Pliny's day hoard knowledge in their own minds like misers. They seem, in fact, to have perverted the cultural metaphor that compares memory to a treasure-house, in so selfishly using knowledge to enrich only their own minds.[11] By locking facts away in their skulls these hoarders take wealth out of circulation, and from society's point of view that is the same as losing it. As Pliny continues, *summumque opus ingeniorum diu iam hoc fuit, ut intra unumquemque recte facta ueterum perirent*, 'the supreme achievement of our intellect for a long time now has been this: by keeping knowledge inside individuals, to make the ancients' well-made products disappear' (*HN* 25.2).[12]

To abscond this kind of wealth from society is no mere act of miserliness. It is a form of theft. As the phrase *fraudare uitam etiam alienis bonis*, 'to cheat life of strangers' goods', indicates, the knowledge that we gain from reading belongs not to ourselves, but to the 'strangers' who made the original discoveries and also to 'life', by which Pliny perhaps means 'human life' or all humanity, the rightful inheritors.[13] You might say that in addition to being misers, non-writing readers are posterity's wicked guardians, embezzlers of other people's inheritance. They have repudiated their proper role as stewards of old knowledge, which entails a duty to transfer wealth to the rightful heirs. Their dishonesty gives point to the figuration of the *Natural History* as treasure-house: in place of private treasuries that siphon wealth from humanity, a public one, representing society's memory and open for all to access.

Pliny's use of financial metaphors for knowledge in the context of a work about material resources allows him to juxtapose two notional economies and invite his audience to compare their relative states. In many ways the world of intellectual goods mirrors that of its material counterpart, particularly when it comes to bad financial practices. The

[11] For the significance of memory as a mental faculty in the *Natural History*, see Lao (2008) 40–73.

[12] For Murphy (2004) 67–68, the main point is that this avarice flouts Pliny's adherence to the Republican aristocratic ethic of openness with one's property. Although I agree that avarice goes against aristocratic ideals, I do not work with the idea that knowledge is here treated as the reader-writer's own property (see following paragraph).

[13] Seneca also views written knowledge as public property, but this view leads him to exclude the idea that individual authors can claim ownership over their writings: *praeterea condicio optima est ultimi: parata uerba inuenit, quae aliter instructa nouam faciem habent. nec illis manus inicit tamquam alienis. sunt enim publica*, 'besides, the last author is best-placed: he finds words ready-made, which assume a new appearance once he has arranged them differently. And he is not laying hands on them as if they belonged to others. For words belong to the public' (*Ep.* 79.6).

avaricious behavior in regard to knowledge that we saw in the passage above is just another manifestation of the avarice that dominates life generally. *auaritiae tantum artes coluntur*, 'only the arts of avarice are being cultivated' (*HN* 14.4), Pliny writes, referring to the greed for material possessions in a more conventional application of the familiar trope. Likewise the cheating and thieving that Pliny sees pervading the world of knowledge plagues straight commerce as well. The *Natural History* is replete with instances of all sorts of commercial fraud—artificial price-fixing that results from cornering the market in hedgehog skin and paint pigments; adulteration of spices and aromatics, wines, drugs, and (again) paints; counterfeiting of gemstones; use of poor-quality material in paper manufacture and marble-cutting; skimping on lime in building construction.[14] Whatever the exact nature of the wrong perpetrated, transactions of both knowledge and goods in Pliny's world are fraught with iniquities that prevent receiving parties from getting their due.

In one respect, however, the notional economies of knowledge and material goods are not in parallel but contrasting states. On the one hand, the 'festive peace' of Roman rule has, by enforcing in nations worldwide a mutual hospitality, encouraged the interchange of natural resources.[15] This type of commerce Pliny looks upon with a bright eye: *quis enim non … profecisse uitam putet commercio rerum ac societate festae pacis omniaque etiam quae ante occulta fuerant in promiscuo usu facta*, 'for who could think that life has not profited from commerce and the fellowship of festive peace, and that everything, even what had been formerly concealed, has been put to common use?' (*HN* 14.2).[16] But knowledge, on the other hand, has no part in this easy flow. There is now

[14] Monopolies: hedgehog skin (*HN* 8.135), paint pigments (*HN* 33.164). Adulteration: spices and aromatics (*HN* 12.28–126 *passim*, 13.16, 16.40), wines (*HN* 14.68), drugs (*HN* 19.40, 19.167, 20.5, 20.200, 24.125, 27.16, 28.110, 31.79, 31.91, 31.114, 34.108), paints (*HN* 33.65–133 *passim*, 35.34–184 *passim*). Counterfeiting of gemstones (*HN* 37.51–198 *passim*). Use of poor-quality material: paper manufacture (*HN* 13.81), marble-cutting (*HN* 36.53). Skimping on lime in building construction: *HN* 36.176.

[15] The image of hospitable shores appears at *HN* 2.118: *inmensa multitudo aperto, quodcumque est, mari hospitalique litorum omnium adpulsu nauigat …*, 'an immense crowd goes sailing, now that the sea, no matter what it is, has opened up, and since every shore's landing is hospitable …'. On Pliny's view of the benefits of empire, see Fear in this volume.

[16] I read *commercio rerum* as referring to material resources, not to knowledge: note that the comment comes in a book about trees common to different nations: *licetque iam de communibus [arboribus] loqui* (*HN* 14.1). For a comparable passage see Pliny's positive remarks at *HN* 27.2–3 about the international transport of healing plants.

less knowledge in common use, not more, because laziness has caused the knowledge once 'opened' to the public to become concealed again.

The reason that Pliny gives for this disparity puts the two economies in contact with each other. If empire caused the growth of material wealth through commerce, that happenstance set in motion a chain reaction in human behavior whose final effect was the drying up of knowledge (*HN* 14.4–5):

> antea inclusis gentium imperiis intra ipsas adeoque et ingeniis, quadam sterilitate fortunae necesse erat animi bona exercere, regesque innumeri honore artium colebantur et in ostentatione has praeferebant opes, inmortalitatem sibi per illas prorogari arbitrantes, qua re abundabant et praemia et opera uitae. *posteris laxitas mundi et rerum amplitudo damno fuit.* postquam senator censu legi coeptus, iudex fieri censu, magistratum ducemque nihil magis exornare quam census, postquam coepere orbitas in auctoritate summa et potentia esse, captatio in quaestu fertilissimo ac sola gaudia in possidendo, *pessum iere uitae pretia omnesque a maximo bono liberales dictae artes in contrarium cecidere* ac seruitute sola profici coeptum.

> Before, when nations kept their authority to themselves and their genius too, because of a certain sterility in fortune it was necessary to till the mind's estate, and innumerable kings were tended by the honor of the arts. And when they showed off they put this kind of wealth first, thinking to transfer immortality to themselves through it. For this reason there was an abundance of the rewards and works of life. *For their descendants, the world's expanse and its bulk of wealth resulted in loss.* After senators began to be chosen by the census, became judges by the census, and magistrates and generals were adorned by nothing more than the census, after childlessness began to be held in the highest authority and power, legacy-hunting was the most fertile source of profit and the only pleasures lay in having things, *life's rewards sank to the bottom and all the arts called liberal fell from being the greatest good down to the opposite*, and in servitude alone did people begin to profit.

On the face of it Pliny is telling a conventional tale—empire leading to the corruption of morals, epitomized by greed. His story, however, is embellished by an original narrative thread, the account of the fate of knowledge. Pliny's history of decline shows a causal relationship between the arts of wealth and knowledge, inverse in character: once all the world's resources became available, its sheer abundance incited such greed that people stopped valuing and producing knowledge. Hence, *rerum amplitudo damno fuit*, 'the bulk of wealth resulted in loss'.

The contiguous nature of the two economies leaves Pliny—borrower, procurator, and steward of knowledge—in an interesting position. He is

in a position to make the tide of influence go backwards. It is not simply that the *Natural History* makes up for the loss of knowledge by rebuilding a public treasury of mind (an act, incidentally, that complemented very well the Flavian project of rebuilding the imperial *fiscus*). In gathering together a set of metaphorical commodities that referred to a set of real commodities, the *Natural History* had both exemplary and instructive potential. Pliny, that is, could demonstrate good financial ethics through the ways in which he treats knowledge, and he could teach the kind of knowledge that might improve economic behavior in the world beyond the text.

Exemplary Ethics

Our discussion of the intellectual economy constructed by the *Natural History* has shown that Pliny is greatly preoccupied with the problem of theft. In different ways Pliny feels that people are not getting their due. Authors deserve to be credited for publishing the knowledge they have worked out, but their successors are servile men who do not honor their loans. Humanity deserves to inherit all the knowledge their ancestors bequeath to them, but greedy scholars cheat the public by sequestering knowledge in their own minds. Pliny's dystopic outlook has both producers and receivers having property unfairly stolen from them.

To this problem of theft Pliny takes care to show that he and his work represent a salutary corrective. There is a context for the prefatory passage on the nonrepayment of loans that bears examining. The debt metaphor comes in the middle of a section introduced by the remark, *argumentum huius stomachi mei habebis quod in his uoluminibus auctorum nomina praetexui*, 'you'll think it a proof of this disposition of mine that in these volumes I have placed authors' names in front' (*HN* pref. 21).[17] Pliny is acknowledging that Titus will notice, and take issue with, Pliny's practice of citing authorities by name. He offers an explanation: *est enim benignum, ut arbitror, et plenum ingenui pudoris fateri per quos profeceris, non ut plerique ex iis, quos attigi, fecerunt*, 'yes, it's generous, to my mind, and full of free-born decency to acknowledge from whom you have profited, not as most of those whom I have dealt with have done' (*HN* pref. 21). It is at this point that Pliny compares plagiarists to debtors who default on a loan, and characterizes them as having a servile and

[17] The reference to his citation practices recurs at *HN* 18.23 and 18.212.

barren mind. The context shows Pliny setting himself in opposition to the other writers—he is not servile, but possessed of a free-born decency, and he does not steal, but returns his literary loans. It is as constant evidence of repayment that we should understand Pliny's habit of listing his authorities in the *Natural History*. According to his explanation, this practice functions as a corrective to the other writers' bad examples.[18]

As for the other problem, humanity being cheated out of its intellectual inheritance by avaricious scholars, the *Natural History*, by its conception and existence, is Pliny's attempt to stem the loss. An obstacle to this project of restitution, however, presents itself in the form of luxury. The distasteful nature of this kind of knowledge makes Pliny waver from time to time. He admits that certain topics are embarrassing or frivolous, and suggests that he is only mentioning them under compulsion.[19] Sometimes he resorts to language resonant of financial ethics to justify himself. Propriety counsels Pliny to be silent on the invention of silk, but he acknowledges the inventor's right to receive credit: *prima eas redordiri rursusque texere inuenit in Coo mulier Pamphile ... non fraudanda gloria excogitatae rationis ut denudet feminas uestis*, 'the first to discover how to unravel [silk-webs] and reweave them was a woman on Coos, Pamphile ... not to be cheated out of her glory in excogitating a method that has women being denuded by clothing' (*HN* 11.76).[20] His sarcasm trivializes Pamphile's achievement, but by naming her, he validates her right to receive credit.

Pliny also acknowledges people's right to receive knowledge relevant to their interests. In Book 9, in the middle of a long section on the subject of purples and shellfish, he comes to a crossroads (*HN* 9.129):

> quod si hactenus transcurrat expositio, fraudatam profecto se luxuria credat nosque indiligentiae damnet. quamobrem persequemur etiam officinas, ut, tamquam in uictu frugum noscitur ratio, sic omnes qui istis gaudent praemia uitae suae calleant.
>
> But if having come to this point my exposition were to hurry past, no doubt luxury would think itself cheated and would condemn us for indiligence.

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[18] Murphy (2004) 52–61 and (2003) 301–308 has mounted a successful critique of the notion put forth by Lloyd (1983) 136 that Pliny's care in citing his authorities indicates a lamentable lack of originality. My reading complements Murphy's views.

[19] Through the force of the gerundive at *HN* 19.152 *res ... non sine pudore dicenda*, and at 28.184 *friuolum uideatur, non tamen omittendum propter desideria mulierum*.

[20] With similar irony, Pliny claims that he does not wish to cheat marine countries out of the glory of producing oysters (*ne fraudentur gloria sua litora*, *HN* 32.62). See also *HN* 5.112, 18.35, 35.116.

> For this reason we will pursue even the subject of manufacture, so that just as we learn about their methods of cultivation in food, so all those who take pleasure in things like that may be expert in their own life's prizes.

Pliny is willing to continue because he has a fundamental respect for the pursuit of expertise, and because he wishes to avoid being exposed to the charge of laziness and dishonesty. As in the passage on silk-weaving, Pliny makes a point of characterizing himself as ethically bound to transmit knowledge. The idea that withholding information constitutes cheating coheres with the view expressed in the passage where he accuses non-writing scholars of cheating life of strangers' goods. He accepts that people who interest themselves in luxury have a proprietary claim over relevant areas of knowledge which his feelings of aversion should not supersede. Moments of duress thus become an opportunity for Pliny to remind himself and others of the rampant bad practices currently plaguing the knowledge economy, and of the lengths to which he will go in order to make up for others' wrongs.

Real Market Intervention

In the passage on shellfish, the reference to cheating draws attention to the consequences of Pliny's authorial decisions upon the knowledge economy. But the rest of the passage, and the remaining discussion on purples, reminds us of the work's potential to affect its ancient audience's lives beyond the text.

Typical of his sensitivity to multiple audiences, Pliny gestures at the practical benefit of his text to both producers and consumers. At one point he notes down the most profitable season to harvest shellfish (after the dogstar's rising and before spring), suggesting that manufacturers should pay attention since *id tinguentium officinae ignorant, cum summa uertatur in eo*, 'dye-factories aren't aware of this [fact], even though everything turns on it' (*HN* 9.133). Later on he shifts perspective (*HN* 9.138):

> pretia medicamento sunt quidem pro fertilitate litorum uiliora, non tamen usquam pelagii centenas libras quinquagenos nummos excedere et bucini centenos sciant qui ista mercantur inmenso.

> The prices for dye are naturally cheaper in proportion to the abundance of the coasts; nonetheless the deep-sea kind never exceeds fifty sesterces per hundred pounds, and the trumpet-shell kind, a hundred per: people who purchase such things as that at an immense price should know this.

As the concluding remark indicates, Pliny now seeks to aid consumers in danger of falling victim to rapacious profiteers.

Anxiety about cheating resurfaces, this time as a problem threatening the real economy. And just as Pliny tries to make amends for the problem in the intellectual economy, so does he make several more attempts in the *Natural History* to reduce the threat in the world of real goods. In Books 12, 33, and 35 the exposition, assuming a strikingly commercial character, lists standard market rates three times in a series.[21] These passages are the only ones in which such information appears densely concentrated. Market rates, moreover, are an atypical kind of information in the *Natural History*, appearing in isolation only in a handful of other instances.[22] With these prices so few and far between, the three continuous lists draw attention to themselves as conspicuous departures from the text's usual mode. Many of the items discussed come attached with little other information than price. Presented this way in the context of a generally commodified presentation of nature, these items acquire an exemplary status as commodities in their purest form.

It is strangely appropriate that what Pliny perceives as most purely a commodity should be none other than luxury goods. The price-list given in Book 12 is for aromatics and spices, in Books 33 and 35, for minerals used to make paint pigments, cosmetics, and drugs. These items had non-luxury applications as well, such as for religious purposes, but Pliny is more attuned to their uses in luxury.[23] For the minerals he even hints at an intended audience: art patrons, who he says have to supply the costlier paints themselves at their own expense (*HN* 35.30 and 44). Other than this loose connection, we have little from the text that would help us contextualize the information historically. Pliny does not tell us from what source he has taken these prices, nor how old they are. We can only say that he presents them as if they were the standard rates in Rome, current or perhaps slightly outdated.[24]

A comment at the end of Book 33 suggests his intentions for setting down the prices. He says (*HN* 33.164):

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[21] Specifically at *HN* 12.28–135, 33.158–164, and 35.31–48. Note also *HN* 33.117–118.

[22] German goosedown (*HN* 10.54), gum from acacia trees (*HN* 13.66), the goat-shrub (*HN* 13.115), ship masts (*HN* 16.202), flour (*HN* 18.90), and turnip (*HN* 18.120).

[23] Young (2001) 14–18 points out the non-luxury applications of some of these items, as well as the fact that they were not necessarily sold at prohibitive rates.

[24] Frank *ESAR* vol. 5 (1940) 284–285 speculates that this information came from Vespasian's official lists. The possibility that these prices were outdated is implied by Pliny's use of the imperfect tense in the passage quoted in the next paragraph.

> pretia rerum, quae usquam posuimus, non ignoramus alia aliis locis esse et omnibus paene mutari annis, prout nauigatione constiterint aut ut quisque mercatus sit aut aliquis praeualens manceps annonam flagellet, non obliti Demetrium a tota Seplasia Neronis principatu accusatum apud consules; poni tamen necessarium fuit quae plerumque erant Romae, ut exprimeretur auctoritas rerum.
>
> We are not unaware that the prices of commodities, anywhere we have placed them, are different in different locales and change almost every year, according to the way shipping has determined them or according to the market, or as some prevailing dealer whips up the price. We have not forgotten that Demetrius in the principate of Nero was accused by the whole Seplasia before the consuls. Still, it has been necessary to set down the prices as they were for the most part in Rome, so that the commodities' value might be expressed.

Pliny concedes, as earlier in the passage on shellfish-dye, that various market forces cause prices to fluctuate, but he makes it clear that he feels compelled to set down the usual prices in Rome in spite of the fluctuation (*poni tamen necessarium fuit*). He consequently appears to intend the prices he lists to have normative power. The case of Demetrius motivates the need for some kind of guideline. While seasonal changes in supply cannot be helped, the possibility of monopoly makes the risk of market abuse always a concern. The only way to combat unfair price-fixing is for individuals to have the ability to recognize an exorbitant rate when they see it. So Pliny sets down typical rates, using the Roman market as a standard. As in the shellfish passage, rhetorical context casts the prices as a form of protection for the consumer or for those on the consumer's side. Since members of the historical audience would have been involved in advocacy and government, this knowledge would have been useful for arguing or adjudicating lawsuits such as the one that the Seplasia brought against Demetrius.[25]

This passage, together with the passage on prices of shellfish, shows that going rates function in the *Natural History* as an advisory against market abuses. Pliny also offers aid for another, related kind of market abuse, adulterating or counterfeiting products. As with exorbitant prices, falsifying commodities is a particular source of concern for luxury products, and in the three aforementioned passages tests for authenticity typically accompany the market rates. In addition, there is a section in

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[25] Pliny shows the relevance of the *Natural History*'s knowledge to arguing lawsuits at *HN* 11.187, where he mentions a case of alleged homicide in which both prosecution and defense employed the medical facts that he has just recorded.

Book 37 that explains how to detect counterfeit gems. Pliny prefaces this passage by writing (*HN* 37.197–198):

> quin immo etiam exstant commentarii auctorum—quos non equidem demonstrabo—, quibus modis ex crystallo smaragdum tinguant aliasque tralucentes, sardonychem e sarda, item ceteras ex aliis; neque enim est ulla fraus uitae lucrosior. nos contra rationem deprendendi falsas demonstrabimus, quando etiam luxuriam aduersus fraudes muniri deceat.
>
> Indeed there are even notebooks by certain authorities—who they are I will certainly not reveal—that tell how to dye crystal into an emerald and other translucent gems, sard into sardonyx, and likewise all the rest of the gems from different gems. And really there is no other form of fraud played on life that is more lucrative. We, by contrast, will reveal the method of detecting fake gems, since even luxury ought to be protected against fraud.

The passage is pointedly structured around the two sides of the purchasing table. Pliny represents himself as actively choosing to aid consumers, even disreputable ones, rather than producers: he refuses to divulge the identities of authors who write on methods of counterfeiting (*quos non equidem demonstrabo*) in favor of teaching methods of detection (*nos contra rationem deprendendi falsas demonstrabimus*). Writing at the upper reaches of what he can stand to teach, Pliny finally draws limits to his totalizing and inclusive impulses. Commercial fraudulence lies beyond the pale, so great an evil to him that he is willing to aid the lesser evil in order to combat it.

But Pliny is able to reap some benefit from helping consumers of luxury in this way. By sharing knowledge that consumers can use to protect themselves, he automatically enlists them in policing the market—what they are learning from him is how to catch cheaters (*rationem deprendendi*). Pliny regularly employs the language of policing in the passages on testing for adulterated spices and paint pigments as well. To give one example (*HN* 12.65):

> probatur candore ac pinguedine, fragilitate, carbone ut statim ardeat … adulteratur apud nos resinae candidae gemma perquam simili, sed *deprehenditur* quibus dictum est modis.
>
> [Frankincense] is tested by its whiteness and oiliness, brittleness, how quickly it catches fire from a piece of burning charcoal … It is adulterated among us Romans with a globule of white resin, exceedingly similar to it, but *it is caught* by the means which have been related.

Deprehenditur: we are reminded of Pliny the procurator catching knowledge-thieves in the act of cheating other authors out of their intellectual property (*scito … me deprehendisse … infelicis ingenii est deprehendi in*

furto, *HN* pref. 22).[26] Author allies himself with audience in a common cause—he watching over the knowledge trade, they watching over luxury.

Market prices and tests for authenticity are two types of information in the *Natural History* that Pliny acknowledges having an impact on the economy of real goods. He makes clear his intention that they be used for positive intervention in commercial ethics. In these instances, collecting and publishing worthwhile pieces of knowledge becomes more than just a way for Pliny to demonstrate a metaphorical financial honesty. Here, he works to reverse the negative effects of material wealth upon the knowledge-economy, using knowledge as an instrument of good to beat back the threat of corruption in real commerce.

Pliny in the Economy of Favors

So far we have presented our discussion as a literary issue, stressing the role that the text plays in constructing the idea of real market intervention. Before we move on to look at further ethical implications of using Pliny's knowledge, let us pause to consider some ways in which the *Natural History* might have had practical commercial utility for its first-century audience, the educated Latin-speaking elite. Thinking about the text's economic uses for this audience means thinking about how the information he presents, in the form and manner in which he presents it, correlated with their practical realities.

When we take a panoramic view of the text, the *Natural History*'s organization around commodified articles of nature suggests that its instruction translated most efficiently into a comprehensive knowledge of available and ideal markets. With its exposition largely proceeding by differentiating between species and subspecies, the text encouraged its reader to be attuned to the fine distinctions between varieties (a skill that I will discuss later in this chapter). Knowledge proceeds from concrete items—all the uses to which things may be put, the processes by which they come to be usable, and how well they perform their intended use. To the extent that the *Natural History* cannot truly be said to be organized around skills and actions, it is inaccurate to call it a technical work in the

[26] The connection is strengthened by the fact that Pliny sometimes refers to adulteration as a *furtum* (*HN* 33.100, 120). He also calls adulteration *fraus* (e.g. at *HN* 12.123, 32.27, 33.163, 34.108, 37.83).

traditional sense. We can say, however, that technical instruction is part of the work's didactic fiction, especially in the areas of agriculture and medicine.

The work could be called nontraditionally technical in the sense that having a comprehensive knowledge of markets was a practical skill for the first-century audience. An art patron would personally benefit from knowing the difference between Vestorian blue, indigo, Armenian blue, and Spanish blue. But more to the point, knowing the difference benefited one when it came to helping the friend who was the art patron. Recent studies of Roman social relations have stressed the importance of economic favors in the performance of friendship.[27] Among the various kinds of financial services that friends requested of each other was the favor of procuring commodities. For the purpose of procuring commodities on another's behalf, a comprehensive knowledge of the market—differences in kinds, qualities, and costs, the secrets to falsifying valuable items—could well become of crucial importance. Making a bad purchase for oneself hurt only oneself, but making a bad purchase for a friend had negative consequences for multiple parties. When one's social competence was at stake, cultivating a knowledge of markets was not an inconsequential matter.

Sources such as Cicero's and the younger Pliny's letters show friends procuring, among other things, high-end cultural products like libraries and artworks.[28] Such evidence is helpful for interpreting the utility of passages in the *Natural History* like the discussion of the history of art. The elder Pliny's conspectus of masterworks offered its first audiences a chance to learn new things about the art market or compare their knowledge and aesthetic tastes against the text's.[29] Similarly his discussion of papyrus, with its detailed treatment of qualities and grades, was geared to the interests of the book collector, his friends, or his flatterers.

The *Natural History* shows that these services were performed for specific items of nature as well. Pliny tells one story of an equestrian procurator of Nero's, still alive in his day, who had been charged with procuring amber for the emperor's gladiatorial games (*HN* 37.45). This

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27 See e.g. Verboven (2002).

28 Cic. *Fam.* 7.23 (SB 2), *Att.* 1.3 (8), 1.4 (9), 1.8 (4), 1.9 (5), 1.10 (6); Plin. *Ep.* 9.39. See also Plin. *Ep.* 1.21 (slaves). At *Ep.* 3.6 Pliny purchases a Corinthian bronze statue for himself.

29 Cic. *Fam.* 7.23.1 praises Gallus' excellent taste.

knight travelled up and down the Baltic region to carry out his task, finally gathering enough to encrust the nets, armor, and even the litters for removing the dead with amber. The subsequent discussion on how to distinguish between the different grades of amber and the types of amber stains available takes on a special relevance in context.

The idea that the *Natural History* catered to a social pressure or incentive to build up market knowledge suggests a new way to look at another notable kind of commercial knowledge in the *Natural History*. The work is full of historical anecdotes about infamous transactions.[30] Since these accounts are usually delivered as invective, it is easy to dismiss their presence in the text as mere rhetorical embellishment, socially functional for such purposes as moral regulation or authorial self-presentation. But many different uses are possible for the same type of information. The astounding awareness that Pliny demonstrates about other people's purchasing habits indicates a habit of mind cultivated out of twin needs. There was the need to build up Transpadane credentials as a man of simplicity and austerity, and there was the need to build up credentials as a shrewd financial agent. So too could this knowledge have functioned for his readership.

Caveat lector?

To return to the literary issues, we have so far seen that Pliny's attempts to combat commercial corruption has involved allying himself with one implied audience, the consumer of luxury, against a third-party, the dishonest dealer. Pliny, however, has so constructed the terms of this alliance that a further opportunity for ethical correction emerges.

In choosing the kinds of information to impart to his reader, Pliny assumes the following aspects of commercial exchange to be norms: there are limits to what a commodity is worth; and commodities should be genuine. The dislike of false advertising and the sense that monetary values have natural limits are commercial applications of attitudes he holds in general. Selling an adulterated or counterfeit product is a form of false naming, and names, for Pliny, have an almost sacralized position in the pursuit of knowledge, since they represent the fundamental first

[30] On the function of stories about historical transactions in Pliny's moralizing discourse see Citroni Marchetti (1991) 266–277.

step between ignorance and understanding.[31] And a proper adherence to limits is a value that Pliny articulates at the earliest opportunity, when he criticizes atomist philosophy for postulating the existence of multiple universes and thus attempting to venture beyond the confines of the known universe (*HN* 2.3–4).

Yet if dealers of luxury goods, by charging exorbitant rates and disguising their wares, are at fault for violating the principles of true names and proper limits, the same charge could be laid against the consumers themselves. Consumers of luxury are defined in the *Natural History* by their cultivation of extravagance and excess. They covet the objects of their delight so much that they seem to possess an unending willingness to pay more and more. About myrrhine ware Pliny comments, referring to cost, *et crescit in dies eius luxuria*, 'the luxury in it increases day by day' (*HN* 37.18). When he continues by noting that the current record for a myrrhine cup is a tiny one bought by a consular for 70,000 sesterces, the sense of outrage he expresses at this example of present-day extravagance is underscored by the idea that it is a maximum soon to be exceeded.

Similarly, consumers of luxury have historically cultivated an illusionist aesthetic that threatens to undermine Pliny's opposition to false advertising. Commodities, he is unpleasantly surprised to find, are valued more highly when their true natures are disguised, as for example has recently occurred with tortoiseshell, painted to resemble wood (*HN* 16.233), and glassware that resembles rock-crystal (*HN* 37.29). For Pliny, luxury is a pernicious force in the world because it makes a virtue out of trickery.

Luxury, additionally, makes a virtue out of adulteration: to Pliny electrum is just gold adulterated with silver, and Corinthian ware is electrum adulterated with copper (*HN* 9.139). He is annoyed that coin-collectors pay more for denarii produced in false mints, which besides being of an illegitimate issue, also happen to be adulterated, copper debasing the silver coin (*HN* 33.132). With items like these, the trickery is total: instead of recognizing electrum, Corinthian ware, and forged coins for the debased materials they truly are, consumers make them valuable by giving them a new name—this is total self-deception, not merely the enjoyment of a recognized deception.

[31] At *HN* 14.2 names are the final piece of knowledge to which things are reduced before they are completely forgotten. On the significance of names in the *Natural History* see Doody in this volume.

One story shows the process by which recognized deception turns into self-deception (*HN* 7.56). During the Republic a slave-dealer named Toranius once sold a pair of identical twins to Antony for 200,000 sesterces. When Antony heard the boys speak, it became obvious that the two were strangers to one another, and indeed had come from different countries. Antony confronted Toranius, who in response pointed out that it was quite a marvel of nature for two unrelated persons to look so much alike. Far from being cheated, Antony had gotten a spectacular deal. This argument was apparently so convincing that Antony, filled with admiration, subsequently looked upon his purchase as ideally suited to his station. Pliny does not state the moral of his tale, but his account suggests a warning against the dangers of ever finding a reason to delight in illusion. In this case a consumer has been convinced to appreciate the counterfeit nature of his product so much that he has forgotten his rightful anger at the false pretenses under which the original transaction occurred. Antony's experience represents a trap into which consumers of luxury have fallen and can always fall. A predisposition to value deceptiveness in the products one buys, or to accept a debased original under the guise of a new marvel, means that one is perpetually vulnerable to the glib dealer, who can adopt Toranius' verbal sleight-of-hand to displace and transform his dishonesty into some admired quality of the product itself.

Given consumers' tendency toward extravagance and their love of false appearances, Pliny has much more at stake in recording market rates and tests for authenticity than to protect consumers of luxury against dishonest dealers: he must protect consumers from themselves. The catalogues of prices and tests take on a sense of urgency when we consider his attitude toward his intended audience. For Pliny, it is a crucial matter repeatedly to remind those interested in fine cookery and perfume, artworks, and gemstones, that their constituent elements are only worth so much, and that these items must always be what they appear to be.

Luxury Pushes Back

Despite his complaints, Pliny finds ways to make his dealings with luxury less uncomfortable. He has shown that he is capable of controlling the knowledge he shares so that it reflects his own value system, which then exerts a pressure on luxurious consumers to alter theirs. For readers

to use his information on market prices and tests for authenticity would result, if not in reducing the consumption in luxury, at least in regulating its commerce—less cheating in the market in the broadest sense.

At the same time luxury's value system pushes on his own thinking. The *Natural History* typically proceeds by making distinctions, especially by judging excellence; seldom would a reader fail to find phrases such as 'best, second best, third', 'more noble', 'most praised', and a multitude of comparable expressions marking the differences between items. This discursive mode is reminiscent of a social practice strongly associated with luxury, connoisseurship. Connoisseurs were defined in Roman society by their expertise at making rarefied distinctions, often as an end in itself—in the *Natural History* they are regularly called *periti*, experts.

A few examples will suffice to illustrate the similarity between connoisseurs and Plinian discourse. Pliny captures the result of a wine-tasting in which a connoisseur remarked to a lucky host that *de indigena uino nouum quidem sibi gustum esse eum atque non ex nobilibus, sed Caesarem non aliud poturum*, 'with regard to indigenous wines this certainly had a new taste to him, and was not the excellent sort, but Caesar would not drink any other' (*HN* 14.72). On oysters, Pliny records that *addunt peritiores notam ambiente purpureo crine fibras, eoque argumento generosa interpretantur*, 'connoisseurs think an oyster is notable when a purple hair *surrounds* the beard, an indication of their *superiority*' (*HN* 32.61). In this comment we might hear an echo of Pliny on a type of berry: *generosissima quibus circa pediculos tenera folia*, 'the *most superior* ones are those where tender leaves surround the stalks' (*HN* 15.85).

Also on oysters, Pliny quotes Licinius Mucianus, the well-known epicure, directly (*HN* 32.62):[32]

> 'Cyzicena maiora Lucrinis, dulciora Brittannicis, suauiora Medullis, acriora Ephesis, pleniora Iliciensibus, sicciora Coryphantenis, teneriora Histricis, candidiora Cerceiensibus. sed his neque dulciora neque teneriora ulla esse compertum est.'
>
> 'Cyzicene oysters are bigger than the Lucrine, sweeter than the British, more pleasant than the Medullan, sharper than the Ephesian, fuller than the Iliciensian, dryer than the Coryphantenan, more tender than the Histrian, whiter than the Cerceiensian. But it is agreed that none are sweeter and more tender than the last.'

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[32] Tacitus writes that Mucianus was known for living with a 'magnificence quite above the scale of a private citizen' (*Mucianum … magnificentia et opes et cuncta modum supergressa extollebant*, *Hist.* 2.5).

These words are a more staccato version of comparisons that Pliny habitually makes, a sample of which we may take from a passage on pears (*HN* 15.53–54):

> cunctis autem Crustumia gratissima. proxima his Falerna a potu, quoniam tanta uis suci abundat .... reliquorum nomina aliter in aliis atque aliis locis appellantur. sed confessis urbis uocabulis auctores suos nobilitauere Decimiana ... Dolabelliana longissimi pediculi, Pomponiana cognomina mammosa ... Fauoniana rubra paulo superbis maiora, Lateriana, Aniciana postautumnalia acidulo sapore iucunda.

> The tastiest of all, however, is the Crustumian. Next to these is the Falernian from the drink, since it abounds with so much juice .... The names of the rest have different names in different places. But with the City's designations accepted, the Decimian has ennobled its producers ... the Dolabellian, which has a very long stalk, the Pomponian, surnamed 'breast-shaped' ... the Favonian, somewhat red, bigger than the 'proud' pears, the Laterian, the Anician which ripens after autumn, pleasant for its tart flavor.

As in Mucianus' discussion, varieties are distinguished by taste, shape, size, and color, and the discussion is capped with a judgment on which variety is the most delicious.

The resemblance of so much of the *Natural History* to the language of connoisseurship reveals a further complication to the question of Pliny's relationship to luxury. We have long known the voice that speaks against consumers of luxury; in this chapter we have tried to give more attention to the voice that speaks to them. Now we have discovered the voice that speaks as a consumer of luxury, and it is the one that predominates in the work. These three voices are at once distinct and indistinguishable. If the text is continually creating a *frisson* of surprise when it shifts from lambasting luxury to accommodating consumers' need to be 'expert on their life's prizes', it achieves a similar effect through opposite means at one point in Book 19. *Etiamne in herbis discrimen inuentum est, opesque differentiam fecere in cibo etiam uno asse uenali*, 'Has distinction even been discovered in garden plants, and has wealth created differentiation in food that sell for even one penny?' (*HN* 19.54), we read, the outrage unmistakable. Yet four books earlier, the text had explained how to make fine distinctions between varieties of chestnuts—one of the cheapest foods available (*uilissima*, *HN* 15.92) and as a type of acorn, a commonplace of pristine simplicity.

An Ambiguous Art

What began as an exploration of the use of one 'economy' to solve the moral problems of a second has led to the conclusion that the text embodies the ideological battle it identifies. Even as Pliny takes on avarice, theft, extortion, and fraud—vices engendered by luxury—in employing the language of distinction he seems in return to have absorbed a habit of mind from his ideological target.

Why should this be? The answer may lie in the way scholarship and luxury were interdependent in Roman culture. Pliny would like us to think that luxury is external to the *Natural History*'s true concerns, but the kind of learning that the work exemplifies requires luxury's presence. Dinner-parties were an important occasion for performing the kind of knowledge we find in the *Natural History*.[33] An onlooker to these occasions would have many ways to interpret the proceedings. One Horatian satire captures the multiplicity well (*Sat.* 2.8.90–93):

> tum pectore adusto
> uidimus et merulas poni et sine clune palumbes,
> suauis res, si non causas narraret earum et
> naturas dominus.

> Then we saw that blackened breast of blackbird was being served, and rumpless pigeons, tasty items, if the host weren't expounding on their causes and natures.

Those sympathetic to the host might call the dinner a serious discussion of natural philosophy, but the poem's speaker supplies us with the opposite perspective: thinking the host's lecture all pretension, he finds the intellectualism incompatible with gratifying the palate.

Another Horatian satire gives more voice to such students of natural philosophy (*Sat.* 2.4). The verse dialogue reproduces in its entirety a gastronomical lecture that Catius, the speaker's friend, claims to have just heard and memorized.[34] Calling the lecture's precepts 'so good they're better' than the wisdom of Pythagoras, Socrates, and Plato (*qualia vincunt | Pythagoran Anytique reum doctumque Platona*, *Sat.* 2.4.2–3), Catius treats the speaker to a recital that includes wisdom such as this (*Sat.* 2.4.32–34):

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[33] See Lao (2008) 74–112.

[34] The historical identity of Catius remains a puzzle. The Epicurean Catius mentioned in Cic. *Fam.* 15.16.1 has been proposed as a candidate, but Palmer (1931) 314–316 expresses reservations.

murice Baiano melior Lucrina peloris,
ostrea Circeiis, Miseno oriuntur echini,
pectinibus patulis iactat se molle Tarentum …

… the Lucrine mussel is better than the Baian shellfish. Oysters comes from Circeii, sea-urchins from Misenum, languid Tarentum prides herself on her broad scallops …

Its similarity to Mucianus' disquisition on oysters reminds us that connoisseurship need not be classified as a practice of luxury, but belongs, for some, to the practice of Epicurean philosophy. Pliny makes no editorial comments about Mucianus' disquisition, but since he appropriates the passage for a medical discussion he seems to accept its status as serious learning. The Horatian speaker, on the other hand, appears to lean in the opposite direction, viewing Catius with an enigmatic irony.

The art of distinction, then, was a site where luxury and philosophy met. The fact that men like Pliny valued learning and luxury so differently helped make practicing this art an ambiguous and contentious affair. Pliny makes visible to his audience that part of his struggle against luxury which centers on battling the bad financial behavior that luxury tends to cause and attract. He involves us in watching him attempt to rehabilitate the economies of knowledge and real goods by taking the bull by its horns. This struggle, however, is only part of a larger fight about which he is silent, how to categorize the very nature of the scholarship he practiced. While he wraps the art of distinction in an overtly philosophical discourse, he also makes perceptible to us the perspective that saw distinction as a materialist and hedonistic pursuit. In the end, distinction's ambiguity contradicts the story that Pliny voices. Learning and luxury were not opposed but in symbiosis: it was through the shared discourse that learning could be used to justify luxury, and luxury could stimulate learning.

CHAPTER FOUR

IMPERIALISM, *MIRABILIA* AND KNOWLEDGE: SOME PARADOXES IN THE *NATURALIS HISTORIA*

Valérie Naas

As an inquiry into nature, the *Naturalis Historia* is a work of knowledge and on knowledge. As a work written by a servant of the Roman emperor, it is also influenced by an imperialistic perspective. At the time of its composition, Roman culture manifested a strong interest in all kinds of *mirabilia*. In the *Naturalis Historia*, imperialism, knowledge and *mirabilia* share complex links, and this paper aims at clarifying some of them.

Imperialism has often proved to be a motor for the conquest of knowledge. Discoveries of new territories and practices lead also to an interest in all sorts of extraordinary things and beings. The *Naturalis Historia* illustrates both the appropriation of nature and knowledge by the Romans, and the fascination with *mirabilia*. According to Pliny, these exemplify the power of Nature and force Man to regain the respect he has lost for her. *Mirabilia* are also a means of praising imperialism, as imperial control over nature and her marvels reflects on the greatness of Rome.[1] That is why, in the *Naturalis Historia*, the *mirabilia* of Rome surpass those of the world: Rome is shown to be the centre of a dominated world, where the centre absorbs and replaces the periphery. Nevertheless, the interest in *mirabilia* also reveals a decline of knowledge, even despite peace and well-being provided by the Empire. The reason for this might well be the loss of *libertas*, which Pliny denounces in veiled terms. In this context, *mirabilia* can be thought of as a compensation for the people.

Imperialism and the Conquest of Knowledge

One of the main contributions of recent works on Pliny the Elder is to show the ideological value of the *Naturalis Historia*. This encyclopaedic

[1] On Pliny, knowledge, and imperialism, see also Fear and Lao in this volume.

work proves to be an inventory, for the glory of Rome, of the resources available in the Roman world, which is assimilated to the *orbis terrarum*.[2]

This ideological aspect appears clearly in the subtitles of recent monographs on the *Naturalis Historia*, such as *The Empire in the Encyclopedia* or *Art and Empire in the 'Natural History'*: Trevor Murphy shows that ethnographic exploration allows us to reconstitute the Roman world in a book;[3] Sorcha Carey demonstrates that the chapters on art history, although mainly about the Greek world, form *Pliny's Catalogue of Culture*, an inventory of works appropriated by Rome and of the Roman tastes.[4]

Furthermore, in recent decades, historians have demonstrated the relation between imperialism and the progress of knowledge at different times and in various fields.[5] Medicine in the Hellenic world is one example. This relationship has also been, for instance, intensely researched as far as British colonialism in the 19th century is concerned.[6]

These observations are supported by Pliny who comments on the interest of several rulers in the conquest of knowledge as well as territories. The most famous example is Alexander, who gave the task of managing scientific investigation to Aristotle, whose work Pliny himself has now brought up to date (*HN* 8.44):

> Alexandro Magno rege inflammato cupidine animalium naturas noscendi delegataque hac commentatione Aristoteli, summo in omni doctrina uiro, aliquot milia hominum in totius Asiae Graeciaeque tractu parere ei iussa … ne quid usquam genitum ignoraretur ab eo. Quos percunctando quinquaginta ferme uolumina illa praeclara de animalibus condidit. Quae a me collecta in artum cum iis quae ignorauerat quaeso ut legentes boni consulant, in uniuersis rerum naturae operibus medioque clarissimi regum omnium desiderio cura nostra breuiter peregrinantes.
>
> King Alexander the Great being fired with a desire to know the natures of animals and having delegated the pursuit of this study to Aristotle as a man of supreme eminence in every branch of science, orders were given to some thousands of persons throughout the whole of Asia and Greece … so that he might not fail to be informed about any creature born anywhere. His enquiries addressed to those persons resulted in the composition of his famous works of zoology, in nearly fifty volumes. To my compendium of these, with the addition of facts unknown to him, I request my readers

[2] See Naas (2002), especially 418–421.
[3] Murphy (2004).
[4] Carey (2003).
[5] See for instance Flemming (2003) 449–463.
[6] See Flemming (2003) 449.

> to give a favourable reception, while making a brief excursion under our direction among the whole of the works of Nature, the central interest of the most glorious of all sovereigns.[7]

Military expeditions were often accompanied by scholars, and the opening up of several new areas of geographical knowledge can be credited to monarchs going on conquest. This was the case with India by Alexander and others, Troglodytica by Ptolemaeus Philadelphos and parts of Africa by Juba.[8]

Territorial expansion and conquest of knowledge are strongly linked. The ruler is instigator, actor and beneficiary of geographical explorations, which are part of imperialism.[9] Moreover, Pliny legitimises the Empire by saying that it contributes to the diffusion of knowledge.[10] His work takes part in this by constituting an inventory of the world dominated by Rome. In this Roman world, territorial domination goes together with the appropriation of resources and knowledge.

However, this may be an oversimplification. One can note in the *Naturalis Historia* some important discordances:

- Pliny criticizes the decline of knowledge, and relates this to imperialism.[11]
- Pliny even contributes to this decline by selecting the type of knowledge, *mirabilia*, he is interested in.
- Knowledge in the *Naturalis Historia* consists more of a collection of extraordinary things than an accumulation of scientifically proved or studied evidence.

Why the mirabilia *in the* Naturalis Historia?

First, why the *mirabilia*? *Mirabilia* are very frequent in the *Naturalis Historia*.[12] They consist on one hand in strange and marvellous phenomena in nature, and on the other hand in extraordinary human creations. Their

7 All translations are taken from the Loeb Classical Library, except for Book 7, which is taken from Beagon (2005).

8 See Naas (2002) 421, De Oliveira (1992) 44–45.

9 See Murphy (2004) 162.

10 On the benefits of imperialism for conquered people, see Ash and Fear in this volume.

11 See Lao in this volume.

12 See Naas (2002) 243–393, Beagon (1992) 8–11, 127–129, 146, 151–152, 156, 158, 234, also Beagon in this volume.

omnipresence in the *Naturalis Historia* can be surprising, as Pliny defines his book as a true reflection of nature: *rerum natura, hoc est uita, narratur* (*HN* pref. 13). The prominence of the extraordinary is also one of the reasons why the *Naturalis Historia* has been discredited at certain times: the encyclopaedia was a major source of knowledge until the 18th century, then began to be strongly criticized in the 19th century precisely for its mistakes and 'eccentric' information, and was finally rehabilitated from two different perspectives: as a way to reconstitute parts of lost texts for *Quellenforschung* at the end of the 19th century; and, especially from the middle of the 20th century onwards, as an essential document on culture and knowledge in the 1st century.[13]

However, the omnipresence of *mirabilia* in the *Naturalis Historia* is well established, and can be explained by reasons both external and internal to Pliny. External factors include:

- The taste of Pliny's time and his audience: interest in extraordinary things is a general tendency of human beings, but increases at certain times and places, such as the Roman Empire in this period.
- A similar trend in the evolution of knowledge:[14] to summarize, in science, the Greek world developed a theoretical and systematic approach, whereas Rome was more interested in practical applications and compilations. Romans were more inclined to gather and spread knowledge than to do research. Some scholars even wonder if there was *stricto sensu*, a Roman science.[15] Although this seems excessive, it is true that in the 1st century AD, science had reached its limits, except in certain fields such as astronomy and medicine: by this period there was more compilation than research. In this context, one can easily understand that Pliny is not really concerned with pure science and is more attracted by *mirabilia*.[16]
- Moreover, Pliny is neither a scientist, nor a specialist. In most of the fields he deals with, there is no progress in science any more. Knowing nature is not a priority in itself for the élite of his time, who are more interested in moral reflection.[17]

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[13] See Nauert (1980), (1979), Chibnall (1975), Gudger (1924).
[14] See Naas (2000); Romano (1994); Parroni (1989) 489–490; Mudry (1986) esp. 81–82.
[15] See Stahl (1962), on Pliny 101–119; Naas (2000).
[16] See Serbat (1986) 2106, also Conte (1991) 95, Serbat (1987) 597, Geymonat (1973) 345.
[17] See Moatti (1997) 307–312.

- Finally, there is no official structure to support or encourage scientific investigation in a continued and organized way, as was the case with the museum of Alexandria.[18]

For all these reasons, knowledge in the 1st century takes the form mainly of works of compilation and encyclopaedias.[19]

Some traits more personal to Pliny include:

- His project and his conception of nature: Pliny wants to celebrate nature as a powerful entity; this power of nature appears best precisely in its *mirabilia*.[20] *Mirabilia*, as Mary Beagon writes, 'illustrate different facets of *Natura*: her power, majesty, untamed wildness, even her cruelty.'[21] So, *mirabilia* show nature's kindness—her anthropocentrism—but also her hardness.
- Pliny's aim: Pliny aims to bring man to respect nature once again. To achieve this, his work gives man knowledge of nature, showing him its power and diversity. The *mirabilia* exemplify this best. So man should regain a degree of humility and respect regarding nature, instead of appropriating and exploiting it. One might be surprised by some contradiction between this aim and Roman imperialism, which Pliny also supports. This paradox will be analyzed later.

Mirabilia *as Praise of the Empire*

To explain the importance of *mirabilia* in the *Naturalis Historia*, even beyond these external and internal reasons, one has to clarify the link between *Naturalis Historia* and imperialism. Instead of an objective inventory of nature, as announced in the preface—*rerum natura, hoc est uita, narratur* (*HN* pref. 13)—the *Naturalis Historia* proves to be an inventory, from a Roman point of view and for the benefit of Rome, of all the resources that the Roman Empire dominates and so possesses.

Many passages throughout the *Naturalis Historia* show that there is a 'cult of *imperium*.'[22] In geographical sections, for instance, the degree

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18 See Beaujeu (1957) 23.
19 See Parroni (1989) 489–490, Moatti (1997).
20 See Naas (2002) 283–285.
21 See Beagon (1992) 156.
22 See André (1982) 65, also Naas (2002) 426–432, De Oliveira (1992) 242–245.

of romanization justifies the order of enumeration of the provinces. In anthropological sections, Pliny praises the great Roman conquerors. Many resources in zoology, botany, or mineralogy are mentioned for their first appearance in Rome, and their diffusion is attributed to the peace and welfare installed by the Roman Empire. In zoological chapters, animals are mentioned according to their first appearance in Rome, in triumphal processions or *ludi* celebrating the victors;[23] thus new animals are linked with conquest. In the sections on botany and medicine, it is the same for plants and remedies (*HN* 27.3). In mineralogy, Pliny mentions the works of statuary art by their first appearance in Rome, as they are spoils of conquest.[24] To exemplify this imperialism in the *Naturalis Historia*, one simply has to read the conclusion of the encyclopaedia, which turns out to be a praise of Italy for all the products—including men—in which this country excels (*HN* 37.201–205).[25]

What is the relationship between the *mirabilia* and the praise of Empire? The *mirabilia* reveal the following: the possession and control of the marvels of nature, even more than her resources, amplify the greatness of the Roman Empire. In this respect, the *mirabilia* go back to the relation between Rome and its Empire. I would like to consider two points: the comparison between the marvels of the world and of Rome and the relation between centre and periphery; in both cases, there seems to be an inversion.

In the famous comparison between the marvels of the world and of Rome, Pliny operates a reversal: he always ensures that the marvels of the world refer back to Rome.[26] The marvels of the world are presented in such a way that they highlight those of Rome. For example, in writing about the Egyptian obelisks, Pliny says that the marvel is not the obelisk itself, but rather the ship the Romans used to transport an obelisk to Rome: *Diuus Augustus eam [nauem] quae priorem [obeliscum] aduexerat miraculi gratia Puteolis perpetuis naualibus dicauerat*, 'That (ship) which carried the first of two obelisks was solemnly laid up by Augustus of Revered Memory in a permanent dock at Pozzuoli to celebrate the remarkable achievement' (*HN* 36.70). So the *mirabile* is no longer the Egyptian monument, but Roman skill in naval construction.

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23 See Murphy (2004) 160–164.
24 See Rouveret (1981) 25–29.
25 See Naas (2002) 427–432.
26 See Naas (2002) 327–398, Naas (2004b).

Moreover, Pliny contrasts the seven traditional wonders of the world with the eighteen marvels of Rome announced in the index of book 36. He then submits the two groups to moral judgment. Therefore, he condemns marvels which demonstrated the immoderation and egoism of oriental monarchs as well as Roman examples of luxury. Indeed, the moral criterion applies both to foreigners and to Romans, and this enables Pliny to distinguish two types of Roman behaviour: one reprehensible—egoism in excessive spending for building enormous theatres (*HN* 36.114–120: built by Scaurus and Curio) or private houses (*HN* 36.109–110); and one praiseworthy case of altruism in working for the well-being of people, as for instance Agrippa did (*HN* 36.121). Therefore Pliny praises marvels of collective utility in Rome, especially those concerning water: aqueducts, fountains, sewers and so on—these are the real marvels of Rome. Of course, Pliny modifies the significance of marvels in a moral sense: collective utility is more important than aesthetic or technical value.

This inversion between the world and Rome culminates in the famous statement; if one were to pile up the marvels of Rome, it would be another world in one place: *uniuersitate uero aceruata et in quendam unum cumulum coiecta non alia magnitudo exurget quam si mundus alius quidam in uno loco narretur*, 'If we imagine the whole agglomeration of our buildings massed together and placed on one great heap, we shall see such grandeur towering above us as to make us think that some other world were being described, all concentrated in one single place' (*HN* 36.101). The verb *narretur* is important: this other world is created by words; Pliny's encyclopaedia accomplishes by words what the Romans achieved by conquest. So, in Rome, another world is created which replaces the rest. Thanks to the Empire, the centre absorbs the periphery, which is no longer a concurrent, independent element because it is dominated, and its value is therefore denied.

This brings me to my second point about *mirabilia*, the relation between centre and periphery. One can see an inversion there, but also a return to balance. Usually, *mirabilia* are located far from the centre, which is part of their status; what is far away can be unknown or vague and the confrontation with it arouses surprise and wonderment. Pliny underlines this at the beginning of his anthropology, where he anticipates the incredulity of his readers (*HN* 7.6):

> Et de uniuersitate quidem generis humani magna ex parte in relatione gentium diximus. Neque enim ritus moresque nunc tractabimus innumeros ac totidem paene quot sunt cœtus hominum, quaedam tamen haud

> omittenda duco maximeque longius ab mari degentium, in quibus prodigiosa aliqua et incredibilia multis uisum iri haud dubito. Quis enim Aethiopas ante quam cerneret credidit? Aut quid non miraculo est, cum primum in notitiam uenit? Quam multa fieri non posse prius quam sunt facta iudicantur?
>
> The human race in general has for the most part been discussed in my account of the people of the world. Nor will I be dealing here with habits and customs, which are countless and almost on a par with the number of human communities. There is material, however, especially concerning those people furthest from the sea, which I do not think should be left out. It includes facts which will, I am sure, seem extraordinary and unbelievable to many readers. Who, after all, believed in the Ethiopians before actually seeing them? And what is not regarded as wondrous when it first gains public attention? How many things are judged impossible before they actually happen?

What is close in space is better known and does not surprise as much. Pliny, indeed, demystifies some extraordinary phenomena precisely by bringing them closer to similar, familiar things. For instance, the existence of enormous serpents in India should not surprise, as there were examples in Rome as well: *Faciunt his fidem in Italia appellatae bouae in tantam amplitudinem exeuntes, ut Diuo Claudio principe occisae in Vaticano solidus in aluo spectatus sit infans*, 'Credibility attaches to these stories on account of the serpents in Italy called boas, which reach such dimensions that during the principate of Claudius of blessed memory a whole child was found in the belly of one that was killed on the Vatican Hill' (*HN* 8.37).

At the centre, the comparison is used as a way to translate things, to make understandable the unknown and the remote. The second version of the comparison enlightens the first. This procedure is common in archaic Greek literature—especially in epic—, but also in periegesis, as Francois Hartog has shown for Herodotus.[27] Pliny uses the same way of writing, but with a fundamental difference: he modifies the direction; the centre is no longer used to make the external understandable, but the external is used to exemplify the marvels of Rome and is absorbed by the centre. Rome is the centre of the Empire and is the point of reference for the encyclopaedia: it becomes therefore the centre of knowledge. The second term of the comparison becomes the centre, like the marvellous ship which transported the Egyptian obelisk to Rome.

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[27] See Hartog (1980) 237–242.

The *mirabilia* show the power of Rome, that is, its control over the remote. Therefore, they are linked with imperialism. As Alessandro Barchiesi writes in a recent article entitled 'Centre and Periphery': 'People like Pliny the Elder and his forerunner Licinius Mucianus are writing *mirabilia, because* they are Imperial functionaries: the act of collecting information on the borders has strong political and moral implications'. *Mirabilia* 'are delightful and curious, but also morally justified by the imposition of the *pax Romana*, which creates at the same time the indispensable leisure and the spatial control necessary to the pursuit of discovery and acquisition. They aim at pleasure for their readers, but they also implicitly declare that Roman power enables knowledge of nature, as well as *humanitas*'.[28]

We will see later that the *mirabilia* also contribute to the decline of knowledge. For the moment, however, let us stay with the relation between centre and periphery. In the *Naturalis Historia*, *mirabilia* are not only on the borders, but in Italy and in Rome itself. Marvels of nature, marvels of human activity, the *miracula Romae* surpass the marvels of the world and constitute in Rome a *mundus alius in uno loco*. Thus Rome is self-sufficient. The marvels of Rome enable the city to do without the rest of the world which is part of its Empire. Pliny makes Rome the most important object of admiration. He invites the readers to rediscover Rome as a new *mundus alius*, since the real external world is dominated and thus part of the known world.

This is especially true in the field of art. Pliny is indignant at people's indifference to the works of art which decorate public monuments in Rome. He encourages his contemporaries to look at them, to admire them and to become aware of these concrete manifestations of Roman power and Empire, precisely because most of these works of art are the spoils of conquest (*HN* 36.27).

Mirabilia, *Empire and Decline of Knowledge*

But our two strands of thought do not fit very well together. On one hand, the unknown is part of the *mirabile*, and on the other hand, the world seems completely known. Indeed, with the Roman conquest, the *orbis Romanus* has been progressively assimilated to the *orbis terrarum*.[29]

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[28] Barchiesi (2005) 402.

[29] See Naas (2002) 418–421, Jal (1994) 62–72, Nicolet (1991b) 12–13.

So how can we explain the omnipresence of *mirabilia* in the *Naturalis Historia*, which is an inventory of the knowledge of nature in the Empire? How can unknown strange things exist in an entirely known space? What is the relation between the *mirabilia* and the knowledge of nature Pliny wants to transmit?[30]

As already stated, the standard of knowledge in the *Naturalis Historia* has been criticized. Notwithstanding Pliny's rehabilitation in the 20th century, there are undoubtedly errors in the *Naturalis Historia*, especially in comparison with Aristotle.[31] But Pliny is not a specialist in the fields he deals with and his work is characteristic of his time, since it is one of compilation at the expense of research. Is there a relationship between the development of *mirabilia* and the decline of scientific progress? Might one think of *mirabilia* as knowledge at a discount, so to speak? Pliny's inquiry into nature turns out to be an inventory of marvels. Pliny wants to show nature's power as manifested in the *mirabilia*. This conception of a nature full of marvels does not in itself preclude scientific knowledge: as Aristotle says, astonishment leads to curiosity, and curiosity awakes desire to understand.[32] And in Antiquity, concepts of credulity and belief were not the same as ours.[33] Nevertheless, even if Pliny is eager to transmit knowledge, his interest in *mirabilia* puts a limit to an exhaustive and objective inventory.[34]

What is more disturbing is that Pliny's approaches are not consistent; his attitude varies according to the dictates of pragmatism. He sometimes tries to explain the strange phenomena—*mirabilia*—but he also sometimes prefers to preserve the *mirabile*, because it fits with his concept of a powerful nature.[35] In his approach to nature, then, Pliny does not choose between a magical conception of things and the drive to explain them. He does not even seem to be aware of a tension between these alternatives. From our point of view, this lack of consistency can go against the scientific scope of his book, but at his time the distinction between the two alternatives was not really valid.[36]

Pliny's attitude, between rationality and *mirabilia*, is also typical of the evolution of science at his time. The rise of the paradox goes with a

30 See Naas (2001), (2004a), (2004b).
31 See Bona (1991), Capponi (1990), (1994), Naas (2000) 262.
32 *Metaph.* 982B11–983A 25. On curiosity, see Beagon in this volume.
33 See for instance Veyne (1983), esp. 121 on Pliny; Sassi (1992).
34 See Michel (1987), esp. 376–377.
35 See *HN* 2.162, 2.164, Naas (2004a).
36 See Callebat (1992).

decline of the sciences. This trend was already present among Alexandrian researchers, who were extremely eager to make inventories of extraordinary phenomena,[37] and it continued in the wake of the *Naturalis Historia*.[38] Pliny's encyclopaedia became a major source for books of marvels,[39] especially of bestiaries and lapidaries in the Middle Ages.[40] In this sense, a transition between Antiquity and the Middle Ages is observable in the *Naturalis Historia*.

We must not seek in the *mirabilia* a proof of the decline of knowledge. They simply reflect a different kind of knowledge: one more attractive, which appeals to a larger audience and which is accessible to it. In this way, the *mirabilia* contribute to the diffusion of knowledge. This type of knowledge corresponds more to Pliny's abilities, not as a specialist but as one who is curious about everything and wants to transmit information.

Usually, *mirabilia* are associated with imperialism, because they illustrate the control exerted by the centre of power on a dominated world. But, despite their link with imperialism, there is also a criticism of imperialism through the *mirabilia*. In fact, as we have seen, the comparison between the marvels of the world and of Rome leads also to a criticism of Roman marvels of luxury, based upon moral criteria. Moreover, in this Empire full of marvels that contribute to its glory, Pliny deplores the decline of knowledge, whereas imperialism should precisely favour it. I would now like to explore this paradox.

First, let us analyze the link between imperialism and knowledge. Conquest and rivalry between cities create a dynamic which contributes to the development of knowledge, as Pliny himself states in a famous passage (*HN* 2.117–118):

> Quo magis miror orbe discordi et in regna, hoc est in membra, diuiso tot uiris curae fuisse tam ardua inuentu, inter bella praesertim et infida hospitia, piratis etiam, omnium mortalium hostibus, transitus famae tenentibus ....
>
> This makes me all the more surprised that, although when the world was at variance, and split up into kingdoms, that is, sundered limb from limb, so many people devoted themselves to these abstruse researches, especially when wars surrounded them and hosts were untrustworthy, and also when pirates, the foes of all mankind, were holding up the transmission of information .... .

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[37] See Jacob (1992), esp. 104.
[38] See Naas (2002) 241–242.
[39] See Roncoroni (1982), esp. 155–161.
[40] See Wittkower (1942).

By Pliny's time, active conquest had ceased. Rome was no longer in an expansive phase but kept the peace and managed its Empire. According to Pliny, the most important advantages of Roman peace were welfare for the people and the diffusion of practical knowledge, such as remedies (*HN* 14.2, 27.3):

> Quis enim non communicato orbe terrarum maiestate Romani imperii profecisse uitam putet commercio rerum ac societate festae pacis, omniaque etiam quae antea occulta fuerant in promiscuo usu facta?
>
> For who would not admit that now that intercommunication has been established throughout the world by the majesty of the Roman Empire, life has been advanced by the interchange of commodities and by partnership in the blessings of peace, and that even things that had previously lain concealed have all now been established in general use?

> Alias [herbas] praeterea aliunde ultro citroque humanae saluti in toto orbe portari, inmensa Romanae pacis maiestate .... Aeternum, quaeso, deorum sit munus istud! adeo Romanos uelut alteram lucem dedisse rebus humanis uidentur.
>
> And other plants moreover passing hither and thither from all quarters throughout the whole world for the welfare of mankind, all owing to the boundless grandeur of the Roman peace ... May this gift of the gods last, I pray, for ever! So truly do they seem to have given to the human race the Romans as it were a second Sun.

But at the same time, men were not making progress with knowledge. They were even not interested in preserving established knowledge, although the Empire seemed to offer them the best conditions for this, namely peace and an Emperor who supported *artes*: *Nunc uero pace tam festa, tam gaudente prouentu rerum artiumque principe, omnino nihil addisci noua inquisitione, immo ne ueterum quidem inuenta perdisci*, 'Yet now in these glad times of peace under an emperor who so delights in the advancement of letters and of science, no addition whatever is being made to knowledge by means of original research, and in fact even the discoveries of our predecessors are not being thoroughly studied' (*HN* 2.117).

So Pliny criticizes Roman power as far as its knowledge policy is concerned: the imperial regime does not provide conditions good enough for knowledge to progress; furthermore, it removes an essential element: *libertas*.[41] This strong criticism builds upon the criticism, more openly

[41] Moatti (1997) 201.

expressed, of *luxuria*, the excess of luxury brought about by imperialism.

As we have seen, in the 1st century AD, ancient science, except in certain fields, had already reached its limits. For this general phenomenon, Pliny gives two explanations specific to the Roman Empire: peace and the lack of freedom. Peace proves to be an obstacle to the progress of knowledge. This is a commonplace, known to historians as the 'peace as danger' topos.[42] Moreover, for Pliny, desire for knowledge has been replaced by cupidity (*HN* 2.118):

> Mores hominum senuere, non fructus, et inmensa multitudo aperto quodcumque est mari hospitalique litorum omnium adpulsu nauigat, sed lucri, non scientiae, gratia; nec reputat caeca mens et tantum auaritiae intenta id ipsum scientia posse tutius fieri.

> Age has overtaken the characters of mankind, not their revenues, and now that every sea has been opened up and every coast offers a hospitable landing, an immense multitude goes on voyages—but their object is profit not knowledge; and in their blind engrossment with avarice they do not reflect that knowledge is a more reliable means even of making profit.

Pliny criticizes imperialism for its consequences for knowledge: *Omnesque a maximo bono liberales dictae artes in contrarium cecidere, ac seruitute sola profici coeptum*, 'And all the arts that derived their name "liberal" from liberty, the supreme good, fell into the opposite class, and servility began to be the sole means of advancement' (*HN* 14.5). Although the *artes* are still called *liberales*, they no longer really exist in the same way, precisely because men are no longer really free: the Empire has removed what is essential to the development of knowledge, that is *libertas*. By the same token, in a moral conclusion, Pliny regrets that *uoluptas*—as *luxuria*—has replaced *uita*—as *libertas*: *Ergo Hercules uoluptas uiuere coepit, uita ipsa desiit*, 'The consequence is, I protest, that pleasure has begun to live and life itself has ceased' (*HN* 14.6). How, then, can Pliny support the Flavian dynasty—and so the imperial regime—and at the same time criticize imperialism?

There is here more of a false expectation than a real contradiction. As a matter of fact, there is no theoretical discussion in the *Naturalis Historia* about the best regime possible.[43] There is also no thought about *libertas*; this word appears very few times in the encyclopaedia. Pliny's

[42] See Fuchs (1958), also Gabba (1984), esp. 16–18, Romano (1994) 12.
[43] See also Fear in this volume.

political ideas are built upon pragmatism. He does not consider the republican regime as an ideal and sees its decline as inevitable. On the other hand, he considers the imperial regime inevitable as well.[44] In fact, he is more interested in men than in political constitutions and regimes, more in the governed than in government. His judgment is based on moral qualities and social utility, in a 'more emotive than philosophical perspective'.[45] This pragmatic position appears very clearly in the distinction Pliny makes between good and bad emperors, where the good emperor encourages research and diffusion of knowledge.[46] But even under the Flavians whom he supports, Pliny regrets the decline of knowledge. He is very well aware of the limits and consequences of Empire on knowledge.

Mirabilia *as Compensation*

In this context, *mirabilia* seem to provide a positive compensation. The *mirabilia* satisfy Roman expectations of novelty, and they arouse people's curiosity, as *panem* and *circenses* do in another way. As far as knowledge is concerned, quantity replaces quality: whereas Pliny accumulates *mirabilia*, scientific knowledge is more rare. The *Naturalis Historia*, then, follows a principle of accumulation which mirrors the rule of Roman power.[47]

This is summarized in the expression *mundus alius in uno loco*: Pliny says that if the Roman marvels were put one upon the other, they would form *mundus alius in uno loco*. Literally, the vertical replaces the horizontal: the *cumulus* of marvels would constitute another world, a vertical world, a mountain, that could rival the rest of the world in its spatial, horizontal dimension. In a metaphorical sense, the concentration of marvels present in Rome replaces the dispersion of marvels in the world; the centre replaces the periphery.

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44 See De Oliveira (1992) 61–63 and 93.
45 De Oliveira (1992) 101–104.
46 De Oliveira (1992) 313.
47 See Naas (2002) 206.

CHAPTER FIVE

THE CURIOUS EYE OF THE ELDER PLINY

Mary Beagon

Introduction: Curious Eyes, Curious Minds

The human animal is by nature curious. As Aristotle put it, all men naturally desire to know (*Met.* 980a 21). According to Cicero (*Fin.* 5.48–49), humans have an innate love of learning (*innatus … cognitionis amor*) which must, however, be guided towards appropriately worthy matters (*maiorum rerum*); undisciplined and indiscriminate inquiry is the mark of the *curiosus*.[1] Cicero is here using in a pejorative sense a term which was at best ambiguous. Derived from *cura*, care, it could denote carefulness and diligence, but also an excess of these qualities. Varro had emphasised the notion of this excess in his etymological explanation of the word: *cura, quod cor urat; curiosus, quod hac praeter modum utitur* (*Ling.* 6.46). It sometimes corresponded roughly to Greek περίεργος and πολυπράγμον, which had connotations of inquiry both futile and meddlesome. The latter adjective is a reminder that the terms applied to more than just intellectual investigation and could indicate the unwelcome activity of the general busybody, as Plutarch's dialogue Περὶ Πολυπραγμοσύνης, 'On Curiosity', aptly illustrates. The Latin *curiosus*, too, could take on this meaning, its most sinister manifestation being its application in imperial Rome to spies and informers.

Plutarch portrays curiosity as a disease or, rather, as an addiction or irrepressible 'bittersweet itch', γλυκύπικρος … γαργαλισμός (522C). No longer controlled by reason, the senses scurry about, peering through strangers' doors (521A), reading private correspondence, snooping on secret rites (522E–F) and listening out for scandal (518A).

Two crucial motifs emerge from his treatment: motion and, especially, vision. It is the latter which will form the backbone of this examination of

[1] *Atque omnia quidem scire cuiuscumquemodi sint cupere curiosorum, duci uero maiorum rerum contemplatione ad cupiditatem scientiae summorum uirorum est putandum*, 'A passion for miscellaneous omniscience no doubt stamps a man as a mere *curiosus*; but it must be deemed the mark of a superior mind to be led on by contemplation of high matters to a passionate love of knowledge' (*Fin.* 5.49).

Pliny's curiosity. Aristotle had stressed the role of the senses in acquiring knowledge, but had privileged sight, since more knowledge was acquired through vision, and with greater subtlety, than through any of the other senses (*Met*. 980a26–27).[2] For Cicero, sight was the keenest of all the senses (*De or*. 2.86–87).

The curiosity of which Plutarch complains is essentially undisciplined vision,[3] the fruits of which are at best inconsequential and at worst morally reprehensible.[4] It needs to be restrained by exercises in everyday self-discipline (not reading graffiti and not tearing open letters as soon as they arrive, 520D–E, 522D), or re-directed towards comparatively harmless goals, such as investigation of historical events or the natural world (517D–E). The inquisitiveness with which he was dealing was, however, essentially that of the meddler and busybody who in his words 'desires to know the troubles of others' (515D).

For those who defined curiosity in more specifically intellectual terms, such a solution was clearly too unfocussed. Adherents of the major philosophical schools of the Roman era, which tended to set a high premium on the association of virtue with the exercise of reason required a more specific definition of what Cicero termed *maiora res* (*Fin*. 5.49, above). The general dos and don'ts are most conveniently illustrated by Seneca: nature, in his words, gave humans *curiosum* … *ingenium* to allow them to be spectators of her works (*de Otio* 5.3–5). Created to stand erect, they can contemplate the heavenly bodies and be inspired by the sight of these to investigate the hidden mysteries of the universe. 'The desire of all men to know' can thus be achieved through philosophical inquiry: contemplation of the heavens will re-assimilate the soul into its celestial origins, achieving its ultimate goal of unity with nature (Sen. *Ep*. 59.16). This 'celestial' *curiositas*, like its less elevated counterpart, is conceived of very much in terms of vision. Cicero in *Tusc*. 1.44–46 describes the earthly preamble to the philosophical apotheosis of the soul in terms of a desire *spectare aliquid et uisere*, 'to observe and see something' (*Tusc*. 1.44); but, unlike Plutarch's busybodies, who 'scatter their glances in all directions'

[2] μάλιστα ποιεῖ γνωρίζειν ἡμᾶς αὕτη τῶν αἰσθήσεων καὶ πολλὰς δηλοῖ διαφοράς.

[3] Vision combines with motion in Plutarch's complaint about those who allow their vision to run around like a badly-trained servant girl outside her master's house, when it should be obeying the command of reason, setting out on a stipulated errand and returning promptly and in good order (521C). Augustine described how curiosity 'darted out through the eyes more and more' while watching *spectacula* (*emicante eadem curiositate magisque per oculos in spectacula*, *Conf.* 1.10).

[4] Augustine was later to call curiosity *concupiscentia oculorum* (*Conf.* 10.35).

(521B), celestial inquirers control and direct their gaze upwards (Sen. *Q. Nat.* 1 pref. 3). Study of the earthly human arts is scorned by Seneca as, at best, an initial preparation for more elevated topics (*Ep.* 88.1). Even the greatest terrestrial natural phenomena in which, as the *Natural Questions* shows, Seneca had a genuine interest,[5] are stepping-stones, or, more aptly, a ladder, to higher things. This progression is clearly outlined in *Helu.* 20.2: the mind seeks knowledge first of the lands, then of the sea and tides, then of nearer space and its meteorological phenomena. Then, *peragratis humilioribus ad summa perrumpit et pulcherrimo diuinorum spectaculo fruitur, aeternitatis suae memor in omne quod fuit futurumque est uadit omnibus saeculis*, 'when it has travelled through the lower air, it bursts through to the upper space, and there enjoys the noblest spectacle of things divine'.[6] The final stage of this elevated vision is clarified by being dependent on the mind's eye, rather than that of the physical body, and by the brighter ambience of the celestial region, which is, as suggested by Cicero in the *Dream of Scipio* (*Rep.* 6.11), 'bathed in clear starlight'.[7]

In contrast to this elevated curiosity, Seneca berates what he terms *desidiosa … occupatio*, 'busy idleness' (*Breu. Vit.* 12.2–13.9), which can include the pursuit of pointless literary and historical trivia, such as the number of rowers Ulysses had, or who was the first Roman to win a naval battle or lead elephants in his triumph or dispatch them in the arena. In the former type of curiosity, as we saw, the eye is trained to travel upwards to the most exalted elements of nature; in the latter, however, it remains earth-bound, immersed in pointless trivia gathered indiscriminately; the 'useless furniture of learning' (*superuacua litterarum supellectile*), as Seneca puts it in *Ep.* 88.36, whose devotee is like the mindless collector who stuffs his house with a display of costly but useless objects.

It has often been noted that some of the examples of such useless furniture given in *Breu. Vit.* were precisely the kind of nuggets Pliny found fit to include in the *Natural History*. A hostile evaluation of his work in accordance with Seneca's criteria for worthwhile inquiry might conclude

[5] Cf. *Ep.* 79.1–2 where he urges Lucilius to investigate the state of Aetna by climbing it while he is in Sicily.

[6] Cf. Sen. *Q Nat.* 1 pref. 7–13.

[7] The ascent of the mind's eye to a celestial region of light is a feature of later Christian contemplative literature, e.g. Richard Rolle, *Ego Dormio* 276–277, on contemplation by which the 'gastly (i.e. spiritual) egh' is taken up into the bliss of heaven; cf. 172–173, the eye of the heart is drawn up above the stars; and Henry Vaughan's *The World* 1–2: 'I saw Eternity the other night | Like a great Ring of pure and endless light'.

that his 'treasure-houses' (pref. 17) were little more than magpie's nests, as 'unbecoming and useless', in Plutarch's words, as the moral treasure-houses of faults described by the latter.[8]

Certainly, in contrast to the Senecan ideal of celestial inquiry, Pliny's curiosity has a distinctly earthly tinge. I do not want to imply that there is a simple antithesis here. Both Pliny and Seneca espoused an essentially Stoic view of the universe,[9] which emphasised a pantheistic notion of divine power dispersed through all parts of nature. Theirs was not the dichotomy between an incorruptible, eternal heaven and a corruptible and transient earth which Christianity, inspired in part by Platonism, promoted. Additionally, the concept of curiosity proved over time to be considerably more complex than a straightforward division between a superior 'celestial' and an inferior 'terrestrial' variety might imply. For more than two millennia, it exhibited an almost protean quality as it adapted itself to different outlooks and priorities.[10] One person's laudable seeker after knowledge was another's heretic, eccentric, busybody or bore, the information they sought variously illicit, inappropriate, pointless or superfluous. To take just two examples: the investigation of the heavens which Seneca advocated as part of the road to philosophical fulfilment had, in an earlier age and different cultural climate, laid the fifth century BC Greek philosopher Anaxagoras open to charges of impiety.[11] And for many early Christian writers, only the institution of a sort of divine filtration system, whereby the inquirer gained such knowledge as pertained solely to his personal salvation through the medium of holy writ and lore, could make intellectual *curiositas* in any sense legitimate.[12]

Nonetheless, there is a significant difference in attitude between Seneca and Pliny. Put simply, as André Labhardt pointed out in an important article written over forty years ago on *curiositas*, Pliny, unlike Seneca and

[8] 520B ἀπρεπὴς καὶ ἀνωφελὴς ὁ θησαυρισμὸς αὐτοῦ τῶν ἁμαρτημάτων.

[9] For Pliny and Stoicism, see also Fear and Paparazzo in this volume.

[10] For the concept of curiosity in classical antiquity, see Labhardt (1960) 206–224, Mette (1956) 227–235, Lancel (1961) 25–46, Walsh (1988) 73–85. From the vast literature on its later history see esp. Benedict (2001), Blumenberg (1983), Daston and Park (1998), Greenblatt (1990) 161–183, Kenny (1998) and (2004), Neuhauser (1982), Pomian (1990) 46–54, Swann (2001), Zacher (1976).

[11] Plut. *Per.* 32.2, Diod.xii.39.2, Kirk, Raven, Schofield (1983) 352–355, Meiggs (1975) 435–436; cf. Plato *Apol.* 426D.

[12] However, it is easy to oversimplify: Augustine, for instance, did not condemn *curiositas* per se and exhibits a complex development of views over the span of his writings: see Torchia (1999) 259–261, more generally, Evans (1998) 113–115, Aertsen (1988) 33–35, Peters (1985) 89–98.

the philosophical exponents of celestial curiosity, isn't trying to quit the terrestrial world, but to keep it always in view.[13] What I hope to explore in this paper are some of the nuances of Pliny's terrestrial curiosity, using the Senecan model of celestial curiosity as a comparison and foil where appropriate. I shall focus in particular on the extent to which the key motif of vision assumes distinctive qualities in keeping with Pliny's particular project. The setting is essentially Seneca's Stoic universe, but with emphases appropriate to Pliny's terrestrial gaze. Finally, I shall argue that the individual objects of his curiosity are highlighted to produce an emotional response very different from that of Seneca's serene contemplation, yet equally valid as an appreciation of nature.

Pliny's Terrestrial Gaze: Sub-lunar curiositas

Firstly, however, a brief comment on the overall setting, the Plinian universe as a whole. In book 2, we have detailed accounts of the stars and planets and the complex regularity of their movements. However, in comparison with his portrayal of earth, the regularity and predictability of Pliny's heavens seems rather lifeless. It is earth which literally bubbles with the divine power of nature (*uis naturae*), portrayed in 2.207–208 as situated deep within her, rather than concentrated in the heavens, and continuously bursting forth unexpectedly and eternally[14] as precious minerals,[15] medicinal springs, volcanic fires and mephitic gases. The unpredictability and variety decried by proponents of celestial curiosity are portrayed by Pliny as the source of life itself.

In addition, while the sun may be the ruler, in Stoic fashion, of the universe (*HN* 2.14), it is the moon, closest to earth and exercising a wide and varied range of influences upon it, which gets the lion's share of coverage in the *HN* (2.41–62, 2.212–223). Traditionally, the moon was the liminal body, marking the boundary between the celestial and terrestrial regions (cf. *HN* 2.48). Obscurity, change and variety are her

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[13] Labhardt (1960) 215.

[14] *Quibus in rebus* [cf. previous account of gems, medicinal springs, gaseous exhalations etc] *quid possit aliud causae adferre mortalium quispiam quam diffusae per omne naturae subinde aliter atque aliter numen erumpens?*, 'In these matters what other explanation could any mortal man adduce save that they are caused by the divine power of nature which is diffused throughout the universe, repeatedly bursting out in different ways?' (trans. Rackham).

[15] Minerals which grow: *HN* 36.125. See Paparazzo in this volume, Healy (1999) 177–178.

hallmarks; anything but harmonious and restful, Pliny's moon twists and tortures the minds of those observing her by her multiform changes (*multiformi haec ambage torsit ingenia contemplantium*, *HN* 2.41). The variability of her shape and even her celestial position are emphasised to a surprising extent, given that they do in reality follow a reasonably regular overall pattern. In addition to her own changeability, she influences every significant area of terrestrial change, including generation and death, growth and decrease, and health and disease, often through her control of the generative element of water (*HN* 2.220–221, 7.38, 7.42).[16] By giving such prominence to this particular heavenly body, Pliny places additional emphasis on his terrestrial focus. It is noticeable that the only time he makes a metaphorical journey into the heavens[17] is occasioned by his discussion of eclipses, primarily lunar ones;[18] and that, in contrast to some other celestial theorising, he is in no doubt as to the value of researches on this phenomenon whose impact on humanity can be so dramatic and potentially disturbing.[19]

Pliny's Terrestrial Gaze: Looking at / in the Natural History

If we turn now to vision, the sense most important, in Aristotle's judgment, to intellectual inquiry, the most striking difference between Pliny and the proponents of celestial curiosity is the range of objects which Pliny considers worthy of being looked at. Both Pliny and Seneca empha-

[16] Interest in the moon's 'plurality of shapes' was attributed to 'Posidonius and the Stoics' (Edelstein-Kidd (1972) fr. 122). Posidonius' personal researches into the terrestrial effects of these changes were significant and well-documented in our sources (Edelstein-Kidd (1972) fr. 217, 218, 219, 291). He was a source for *HN* 2.

[17] I am discounting *HN* 27.3, where he invites a view from a height which is more analogous to that attained from a terrestrial than a celestial viewpoint.

[18] *Haec ratio mortales animos subducit in caelum*, 'This theory leads mortal minds upward to the heavens' (*HN* 2. 49).

[19] It should be noted that Lucian's journey to the moon in *Icaromenippos*, although ostensibly satirising philosophical / celestial *curiositas*, also enabled him to ridicule aspects of its terrestrial counterpart. *En route* to what turns out to be a very traditional, non-philosophical Olympian abode, the narrator stops off on the moon. From this vantage point, he is annoyed to find that earth is too small to be viewed clearly. However, he is advised by a charred Empedocles, who, unlike Pliny, had got himself killed by a volcano on purpose, to turn his right eye, which has acquired an eagle's powerful sight, towards it. What he proceeds to pick out with the organ which would have allowed him to look at the sun itself are not even the natural beauties of the earth, but all the delinquencies of humanity as committed behind closed doors. Exemplar of neither Senecan nor Plinian inquiry, he is Plutarch's worst kind of *curiosus*, the prying busybody.

sise the spectacle of nature.[20] However, in Seneca's strictly hierarchical ascent, terrestrial things are put in their place as *superuacua* and the soul quickly moves on to the celestial objects alone worthy of its contemplation. To Pliny, however, 'nothing in the contemplation of nature is to be deemed *superuacuum*' (*HN* 11.4). The reader's attention is drawn to the tiny, the overlooked and the despised—insects, for instance (*HN* 11.2–4), since 'nature is to be found in her entirety nowhere more than in the tiniest of her creations'. Rather than the heavenly bodies, contemplation of a single gem-stone suffices for many people as an epitome, within the narrowest of confines, of the entire grandeur of nature (*HN* 37.1).

Moreover, just as the moon was emphasised in accordance with its function as the boundary of the terrestrial world, the eye, the gateway crucial to the perception of the material world, is treated by Pliny in considerably more detail than any other part of the body. In *HN* 11.139–153, he proceeds from physical variety—shape, colour, strength of vision—to its emotional significance and its function as transmitter of sense impressions to the mind. Elsewhere, he treats of the eye's more mysterious and sometimes sinister powers manifested in the phenomenon of the Evil Eye (*HN* 7.16–18). It is important to stress the connexion between inner and outer eye in Pliny, as there is certainly no simplistic difference to be discerned between the champions of celestial and terrestrial curiosity on this score. Ancient theories on how the eye saw and on the relationship between eye and mind varied, but Pliny is in agreement with, for example, Cicero in *Tusc.* 1.46 on the fact that the eyes were little more than windows to the soul which then processed the images gathered; the mind is the true instrument of sight and of observation (*HN* 11.146–147).[21]

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[20] Beagon (1992) 147–152.

[21] *Animo autem uidimus, animo cernimus; oculi ceu uasa quaedam uisibilem eius partem accipiunt atque tramittunt*, 'In fact it is the mind which is the instrument of sight and of observation; the eyes act as vessels receiving and transmitting the seeing portion of the mind' (*HN* 11.146). Pliny's *uasa* may be analogous to Cicero's *uiae* from the eye to the brain discovered by *post mortem* dissection; a possible reference to arteries which, being empty of blood in such circumstances, were thought to convey air. Herophilus, however, had discovered the nerves. He may have thought that the optic nerve carried *pneuma*, which enabled perception, from the brain to the eyes; a process somewhat analogous to the Stoic theory of Chrysippus by which the soul's *pneuma* flowed from its ruling part to the various sensory organs (see von Staden (2000) 88–89 with references). A process of this nature may be behind Pliny's description, but it remains extremely unclear how he thought vision worked. Two passages on gemstones may offer further clues. *HN* 37.199 notes that fake gems, with their interior defects and rough surfaces, have a brightness which 'fails to strike the eye' (*priusquam ad oculos perueniat desinens nitor*); while the inferior colour of the *hyacinthus* 'almost fails to strike the eye' (... *ut paene non attingat*

However, celestial curiosity did lay particular stress on non-physical aspects of apprehension. Physical vision is, of course, abandoned entirely in the *post mortem* existence posited as a sort of philosophical apotheosis in *Tusc.* 1.44. How far celestial contemplation whilst still on earth can achieve this is less clear, but Seneca certainly implies that the physical stimulus is of less importance: the philosophy which deals with the divine is higher and more spiritual and doesn't restrict itself to the eyes (*Q. Nat.* 1, pref. 1). In *Q. Nat.* 7.30.7, he states that the hidden things of the universe have to be seen through the mind (*cogitatione uisendus*). The final contemplative vision of *Helu.* 20.2 is achieved when the soul bursts through into the celestial realm and contemplates all that has been and ever will be. It would therefore seem that, at this exalted level, the living, too, largely abandon physical apprehension, in a sense foreshadowing some later expressions of the Christian mystical experience.[22]

In Pliny, the relationship between mental and physical sight is different. It is true that the sights of the *HN* have to be presented to the reader's mental eye through the medium of Pliny himself. They are, however, overwhelmingly physical[23] and what is particularly striking about Pliny's treatment is the effort he makes to arouse and sustain their 'ocularity'. A delightful and rather unusual adjective *oculatus*, literally 'endowed with eyes', does appear in Pliny; not, as it happens, in his personal usage, but as part of a *senatus consultum* quoted in *HN* 34.24, by which the senate ordered a statue in honour of a murdered ambassador to be placed *oculatissimo loco*, in a place 'most eyed' because most full of people looking.[24] Its apparent use in an official document only serves to underline the importance of ocularity in Roman society, as instanced, for example, in the great lengths to which the Roman aristocracy would go to present

... *HN* 37.126). Colour played an important role as the object of sight in some theories of vision (Smith (1999) 31), including those of Aristotle, a source for *HN* 11, for whom the colour of an object activated the intervening air which in turn activated the eye (*De an.* 419A12–15). The gemstone passages are also suggestive of the intromissionist views of the Epicureans. However, 11.146's 'receiving and transmitting' is perhaps more indicative of Stoic views, which combined extramissionist and intromissionist theories to posit an interaction between an ocular flux and external light (see Smith (1999) 28–31). On vision theories generally, see Smith (1999) and Lehoux (2007). I am grateful to Daryn Lehoux and Ernesto Paparazzo for discussion on aspects of this problem.

[22] Above, p. 73 and n. 7.

[23] Cf. Murphy (2004) 212: the world of the *HN* 'is comprised of objects'.

[24] [*Octauio*] *in qua legatione interfecto, senatus statuam poni iussit quam oculatissimo loco, eaque est in rostris*, 'As Octavius was killed while on this embassy, the senate ordered a statue to be erected to him "in the spot most eyed" and that statue stands on the Platform' (*HN* 34.24, trans. Rackham).

their fame and fortune visually. Particularly associated with the *Natural History*, however, is the use of *spectatus*, from *specto*, to refer not just to distinguished persons, established facts or manifest qualities but also to remarkable things: a laurel (*HN* 15.134), a peninsula (*HN* 4.107), Mount Vesuvius (*HN* 3.62), even the comb of the common farmyard cockerel, gift, Pliny says, of a nature whose artistry is itself described as *spectatus* in *HN* 11.1.[25]

The statue set up *oculatissimo loco* set out to capture the eyes of everyone in the forum. Once the eyes had been captured, the gateway to the mind was open and this singular *exemplum* of patriotic self-sacrifice could be committed to memory. In the final section of this paper, it will be suggested that the many individual sights encountered on the journey through the *Natural History* are deliberately set up to capture the eyes of Pliny's readers with the intention of inculcating a true and lasting appreciation of the terrestrial world—their world—and to reflect on their place and purpose in it. In particular, the *HN* is full of wonders, and wonders above all, in Horace's words, captured and 'transfixed the eyes' (*defixis oculis*, *Epist.* 1.6.14).[26]

The Sights of the Natural History

The human predilection for novelties and wonders received a bad press at times, both in antiquity and later, but to see Pliny as pandering to the baser instincts of his audience, peddling inconsequential trivia in place of worthwhile explanation of nature's workings and functions is to miss the point.[27] Pliny has a deliberate strategy: like the Elder Seneca, who compared himself to the games givers who apportioned novelties to maintain the audience's suspense (*Contr.* 4 pref. 1) and ensure that they did not abandon the show, he is to an extent manipulating his readers, but as a means of continually refreshing and intensifying their gaze, thereby increasing their appreciation of nature. He is passionately committed to

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[25] *Olea … spectatissima in monte Parnaso* (*HN* 15.134); *Lugdunensis Gallia habet … paeninsulam spectatiorem excurrentem in oceanum* (*HN* 4.107); *Pompei haud procul spectato monte Vesuvio* (*HN* 3.62); (on tufts and crests on birds) *sed spectatissimum insigne gallinaceis* [*dedit natura*], *corporeum, serratum* (*HN* 11.122); (on the anatomy of insects) *nusquam alibi spectatiore naturae rerum artificio* (*HN* 11.1).

[26] See below n. 31.

[27] The *mirabilia* of the *HN* also played an important and complex role in the imperialistic vision of the work (see Naas in this volume), as well as in the structure and identity of his project as a whole; see *ead.* (2002) 236–392, Murphy (2004) esp. 18–22.

persuading them of the importance of this topic, an importance which, as stressed earlier, lies precisely in its relevance to them: *natura hoc est uita*, nature as inhabited by humanity. Seneca had claimed in *Q.Nat.* 1, *pref.* 7 that it was celestial investigation which pertained to the human soul. For Pliny, who believed that the soul was destroyed on death (*HN* 7.188), terrestrial matters are the most natural goal of human investigation. His comments in *HN* 7.52,[28] on the mobility and sensitivity to images of the human mind in effect tell his readers that variety, change and movement link them intimately with these same qualities as exhibited in the workings of *uis naturae* in the terrestrial world. The power of the human mind, in this instance exhibited in its ability to affect the appearance of the foetus, mirrors the power of nature in its ability to produce oddities and wonders. The human mind is to this extent earth-bound in a positive and profound way. Humanity is of this world and part of its creative force.

To rivet his readers' attention, then, Pliny confronted them with wonder. Like Aristotle, who had described wonder as the impetus to knowledge,[29] he regarded it as a stimulus to mental activity, to intellectual curiosity, in fact. This was, and remained for the next two millennia, a controversial idea,[30] and others, in antiquity and later, were to regard it as paralysing rather than stimulating the mind. Horace in the lines partially quoted earlier goes on to describe the person whose eyes are transfixed by wonder as numbed or stupefied in mind and body (*Epist.* 1.6.14).[31] For Strabo, it was symptomatic of ignorance rather than a guaranteed goad

[28] *Cogitatio etiam utriuslibet animum subito transuolans effingere similitudinem aut miscere existimatur, ideoque plures in homine quam in ceteris omnibus animalibus differentiae, quoniam uelocitas cogitationum animique celeritas et ingenii uarietas multiformis notas inprimit, cum ceteris animantibus inmobiles sint animi et similes omnibus, singulis in suo cuique genere*, 'Even a chance thought which briefly crosses the mind of one or other parent may form or confuse the resemblance. This is the reason why there are more variations among the human race than there are among all the animals: the swiftness of man's thoughts, his mental agility and the versatility of his intelligence produce a wide variety of features; whereas the minds of the other animals are sluggish and exhibit a uniformity in keeping with their particular species.' Discussed in Beagon (2005) 213–215.

[29] διὰ γὰρ τὸ θαυμάζειν οἱ ἄνθρωποι καὶ νῦν καὶ τὸ πρῶτον ἤρξαντο φιλοσοφεῖν. (*Met.* 1.2 982B12–13). See Naas in this volume.

[30] See most conveniently Daston and Park (1998).

[31] *Gaudiat an doleat, cupiat metuatne, quid ad rem, | si quicquid uidit melius peiusue sua spe, | defixis oculis animoque et corpore torpet?*, 'Whether a man feel joy or grief, desire or fear, what matters it if, when he has seen aught better or worse than he expected, *his eyes are fast riveted, and mind and body are benumbed*?' (Hor. *Epist.* 1.6.12–14, trans. Goold).

to intellectual investigation (1.3.16): the unfamiliar disturbs the senses and shows one's ignorance of natural occurrences. Later, Descartes was to analyse it as important, when present in moderation, for the acquisition and retention of new knowledge (*Passions of the Soul* 75). When present in excess, however, it could stifle reason (ibid. 76). This suggestion, that wonder could have a deleterious effect on reason, reminds us that it was perceived as an emotional response of precisely the kind that ancient philosophers feared could perturb and confound the mind. The commonplace *nil admirari*, 'be amazed at nothing' (cf. Hor. *Epist.* 1.6.1), was expressed in various ways by the philosophical schools. Strabo describes the ἀθαυμαστία or absence of wonder praised by Democritus and other philosophers as being associated with freedom from dread and terror and other emotions which perturb the mind. For Epicureans it was linked with ἀταραξία, freedom from disturbance, and Cicero uses the phrase in connexion with the Stoics' goal of indifference to outside circumstances (*Off.* 1.66–67; cf. *Tusc.* 3.30). Common to all was a desire to minimise the chances of emotional disturbance overriding the calm rationality of the philosopher.[32] The notion of rational explanation appealed to various writers of technical / scientific works involving natural phenomena. Strabo deployed this 'philosophical' view as justification for his efforts to give rational explanations for various changes in the natural landscape (1.3.16). Seneca and Vitruvius also tend to stress that there are rational explanations for the natural phenomena they describe.[33]

For Pliny, however, emotional reaction is not necessarily a bad thing. Tellingly, one of his own many expressions of surprise in the *HN* concerns the fact that leaders of philosophical schools have been heavily represented among those who have suppressed their emotions to the

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[32] It is interesting that the language used by Cicero and Seneca of intellectual endeavour can, like that of terrestrial curiosity, be eager, even passionate (cf. Kenny (2004) 41–43, on the theme of curiosity as *affectus* in seventeenth-century Germanic university dissertations on the subject). However, the emphasis is always on rationality and control. Cicero talks of *cupiditas ueri uidendi* (*Fin.* 2.4); in *Tusc.* 1.44, it is *insatiabilis cupiditas ueri uidendi.* Yet the soul's desire for truth has a set goal and a predetermined route to that goal. The journey upwards is itself a process of freeing the soul from bodily passions and the study of the regularity and order of the heavenly phenomena is said by Cicero to encourage self-control (*Fin.* 4.11). The passionate language need occasion no surprise: even the Stoics, whose antipathy to the passions was most marked, did not necessarily fear their initial promptings, only the subsequent failure to control them appropriately (Sen. *Ira* 2.3.1; cf. Augustine *De ciu. D.* 9.4 with Gell. *NA* 19.1; Braund and Gill (1997) 9).

[33] Toules-Morisset (2004) 199–220, Courrent (2004) 265–278.

point of being labelled ἀπαθεῖς (*HN* 7.79–80).[34] Surprise is not the reaction which might have been expected, given the philosophical antagonism to the emotions just described. However, the explanation for Pliny's comment may lie in the objections voiced, according to Aulus Gellius, by a later critic, Herodes Atticus, who argued that excessive suppression of the emotions would in fact result in a lack of vital mental stimuli, leading to a weak and sluggish mind.[35] On this view, then, emotion can act as a goad to mental activity. It is significant that the only occasion on which Pliny mentions a wonder which stifles the brain is in *HN* 8.114, in which *omnium rerum miraculo stupens*, being stunned by surprise at every turn, is a characteristic of the deer, *animal simplex*.[36] It is hardly likely in that case to be a characteristic of humanity, whose *uelocitas*, *celeritas* and *uarietas* of mind were contrasted with the dull uniformity of animals' minds generally in *HN* 7.52 quoted above.

If we look more closely at the text of the *HN*, we see that wonder, rather than paralysing or disorienting, kick-starts reason into life. Pliny's frequent use of a wide range of terms connected with wonder—*mirum*, *mirabilis*, *miror*, *admiror* and so on—is intended to grab the readers' attention and make them look harder at the world around them.

[34] *Exit hic animi tenor aliquando in rigorem quondam toruitatemque naturae duram et inflexibilem affectusque humanos adimit, quales ἀπαθεῖς Graeci uocant, multos eius generis experti, quod mirum sit, auctores maxime sapientiae, Diogenen Cynicum, Pyrrhonem, Heraclitum, Timonem*, 'However, this equability of temperament sometimes turns into a sort of rigidity of character and a hard inflexible severity lacking the normal human emotions. The Greeks call such persons ἀπαθεῖς or emotionless and offer many examples; in particular, strangely enough, among their philosophers: Diogenes the Cynic, Pyrrho, Heraclitus, and Timon' (*HN* 7.79).

[35] *In ea dissertatione, quantulum memini, huiuscemodi sensus est: quod nullus usquam homo, qui secundum naturam sentiret et saperet, adfectionibus istis animi, quas πάθη appellabat, aegritudinis, cupiditatis, timoris, irae, uoluptatis, carere et uacare totis posset, atque, si posset etiam obniti ut totis careret, non fore id melius, quoniam langueret animus et torperet, adfectionum quarundam adminiculis, ut necessaria plurimum temperie priuatus*, 'The sense of the discourse, so far as I remember, was as follows: that no man, who felt and thought normally, could be wholly exempt and free from those emotions of the mind, which he called πάθη, caused by sorrow, desire, fear, anger and pleasure; and even if he could so resist them as to be free from them altogether, he would not be better off, *since his mind would grow weak and sluggish, being deprived of the support of certain emotions, as of a highly necessary stimulus*' (*NA* 19.12.3: trans. Rolfe).

[36] *Cetero* [*ceruus*] *animal simplex et omnium rerum miraculo stupens in tantum ut equo aut bucula accedente propius hominem iuxta uenantem non cernant aut, si cernant, arcum ipsum sagittasque mirentur*, 'In other respects the deer is a simple creature and stupefied by surprise at everything—so much so that when a horse or a heifer is approaching they do not notice a huntsman close to them or, if they see him, merely gaze in wonder at his bow and arrows' (*HN* 8.114: trans. Rackham).

Descartes' basic definition sums it up: wonder is 'a sudden surprise of the soul which makes it ... consider attentively those objects which seem to it rare and extraordinary' (*Passions* 70).[37] There are many surprising objects in the *HN*, too numerous to list here. Yet Pliny also uses wonder language in situations where the subject matter is not obviously exotic, such as the description of the minute intricacies of insects (*HN* 11.2–4). Particularly striking is the frequent use of *mire*. In the phrase 'a marvellous cure for', it indicates the effects of herbal remedies on various mundane complaints. Elsewhere it highlights all manner of domestic marvels which his readers can try at home themselves, including the 'striking and wondrous' power of boiling cabbage to remove the scale from saucepans (*HN* 20.95).[38] Pliny wants to instigate a 'surprise of the soul' for his readers which induces them to look with attention not just at the conventionally marvellous but also at things they might otherwise take for granted. In effect, his readers are continually admonished to rouse themselves from a complacent torpor and look again.

In this respect, it is also important to note that terms denoting his subject matter as noteworthy, memorable or remarkable often occur either on their own or in conjunction with terms more closely allied to the concept of wonder. We have met *spectatus*, 'remarkable', already. In addition, there are over 100 usages of *insignis*, 'noteworthy' in the *HN*. They are used to focus the reader's attention on a whole range of objects, from the obviously extraordinary, like the Arimaspi, *insignes* by virtue of having a single eye in the centre of their foreheads, to the apparently pedestrian: it is (*HN* 19.110) a *noteworthy* fact (*insigne*) about the common leek that, although it likes well-manured rich soil, it dislikes damp places.[39] Memorability combines with wonder in *HN* 16.134, when we are reminded that Pliny's discourse is about nature, 'so *remarkable* for her manifold and marvellous methods' (*multis modis mirisque memorabili*). Again, in *HN* 21.73, the facts Pliny has discovered about feeding bees are described as 'wonderful and worthy of recording' (*mirum est dignumque memoratu*).[40] The use in the last two quotations

37 Trans. Voss (1989).

38 *Virium brassicae unum et magnum argumentum addemus admirabile*. Cf. *HN* 20.148, 20.169, 20.173, 20.253, 22.23.

39 *Arimaspi ... uno oculo in fronte media insignes* (*HN* 7.10), *Insigne quod, cum fimo laetoque solo gaudeat, rigua odit* [*porrum*] (*HN* 19.110).

40 *Nunc etiam totus sermo de natura est multis modis mirisque memorabile* (*HN* 16.134), *Mirum est dignumque memoratu de alimentis* [*apium*] *quod comperi* (*HN* 21.73).

of *memorabili* and *memoratu* reminds us that wonder, according to Descartes (above), encouraged knowledge to lodge in the memory.

In short, to Pliny's army of wonder words is joined an auxiliary force of terms which urge the reader to 'sit up, pay attention and commit to memory'. We are reminded, yet again, of his famous comment when describing to Titus his energetic working pattern: *uita uigilia est*, life is being awake, and, more than that, being on the alert, for it was a metaphor derived from military guard duty (*HN* pref. 19). Sleeping was a death-like state and cut down the amount of time you were truly alive, according to *HN* 7.167.[41] Those who would truly live should keep their eyes open and look sharp.

Mirabilia, uigilia, uita: *The Regenerative Cycle of Wonder*

If marvel is a stimulus, what do Pliny's readers gain from being continually goaded into alertness? Positive evaluators of wonder tended to suggest that it set into motion a train of mental activity which led to further consideration or investigation and resulted in a clearer understanding or explanation. Here, however, we encounter a certain ambiguity in Pliny's attitude. Put briefly, explanation tends to destroy wonder as Carlin Barton puts it,[42] quoting from Plutarch's *Symposium* (a discussion, incidentally, on the amazing properties of the Evil Eye) that 'the man who demands to see the logic of each and every thing destroys the wonder in all things'[43] (680C). Those in antiquity and later who regarded wonder as inducive of intellectual torpor rather than activity obviously regarded this as a good thing. Thus, Seneca cites as an aim of the *Q.Nat.* the uncovering and passing on of nature's secrets (3, pref. 1). Those who fix their eyes rather than their minds (*oculis non ratione comprehendimus*, *Q.Nat.* 6.3.2) on the remarkable are likely to remain caught in a paralysing web of fear. Pliny's attitude to causation is more difficult to interpret. Commentators have observed his ambiguity towards certain celestial investigations.[44] In *HN* 2.55, he suggests that it is not his purpose to probe

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[41] Thus his maxim *uita uigilia est* is prefixed with the assertion that his studies have ensured that he is 'living' longer: *pluribus horis uiuimus* (*HN* pref. 18).

[42] Barton (1993) 101.

[43] ὁ ζητῶν ἐν ἑκάστῳ τὸ εὔλογον ἐκ πάντων ἀναιρεῖ τὸ θαυμάσιον.

[44] Pliny expresses doubts about some of the more ambitious cosmic theories and calculations partly, perhaps, because they are suggestive of human *superbia* (Beagon (1992) 44–46) and partly because, like Seneca and Cicero, he sees overly abstruse and time-consuming studies as rather pointless. Cf. *HN* 2.3–4.

too deeply into causes and that explanations don't exist for everything anyway (cf. *HN* 2.101, some causes are too deeply hidden in nature). At other times, he leaves it up to the reader to delve further: 'all matters contain some deeply hidden mysteries which each person must use his own intelligence to penetrate' (*HN* 17.29). However, it is implied that others will one day be uncovered even if they are not fully known at present (*HN* 2.116). Italo Calvino, in an essay on Pliny, described him as at once exalting the logic of cause and effect and at the same time minimising it, 'for if you find the explanation of the facts, that is no reason for the facts to cease to be marvellous'.[45] That the facts, explained or not, have an inherent standing and validity, is essentially the point which Plutarch's *Symposium* speaker goes on to make: search out the reason for the facts by means of logic, he says, but take the facts themselves as they are recorded.[46]

In fact, the last thing Pliny wants is for the facts to cease to be marvellous. And what he is trying to do is to use wonder to regenerate rather than destroy itself; hence the motif we have noted of looking anew at the familiar as though it is wondrous, as well as focussing on the strange and startling.[47] In addition, experience, regarded—from Strabo in the first century to Lord Kames in the eighteenth[48]—as another factor which took the edge off wonder and essentially destroyed it can, in the *HN*, actually engender it. In the prelude to his account of the Chauci, Pliny declares that he will examine their treeless lifestyle, 'compelled by wonder learned from experience' (*cogeret admiratio usu comperta*, *HN* 16.1).[49] Finally, he notes that things already investigated may yet

[45] Calvino (1986) 320. Murphy suggests that the *HN* presents things as they are rather than trying to explain them ((2004) 211–215, esp. 214) and notes that P.'s assertion that the wondrous races of book 7 are created by nature to please herself and amaze humanity is not conducive to further analysis (op. cit. 90).

[46] 680D: δεῖ δ' ….τὸ μὲν διὰ τί γίγνεται τῷ λόγῳ μετιέναι, τὸ δ'ὅτι γίγνεται παρὰ τῆς ἱστορίας λαμβάνειν.

[47] Even Seneca can on occasion use wonder to reinvigorate his more esoteric philosophical investigations: *non aliter illam (sapientiam) obstupefactus quam ipsum interim mundum, quem saepe tamquam spectator nouus uideo*, 'I gaze on (wisdom) with bewilderment, just as I sometimes gaze upon the firmament itself, which I often behold as if I saw it for the first time' (*Ep.* 64.6).

[48] Strabo 1.3.16 'For if a large number of … instances are placed in view, they will put a stop to amazement', ἀθρόα γὰρ τὰ τοιαῦτα παραδείγματα πρὸ ὀφθαλμῶν τεθέντα παύσει τὴν ἔκπληξιν. Lord Kames, ed. Price (1993) 262.

[49] A reference to Pliny's personal experience of their habitat while on military service under Corbulo, in 47. Arguably, he is even more surprised at the tribes' refusal to alleviate their miserable lot by submitting to the material advantages of Roman rule. See Fear in this volume.

undergo further change,[50] going on to give instances of local climatic changes. These are the kind of variations Strabo insisted on placing in the broader context of all such changes throughout the world, so that they might be recognised as part of a general rule and not cause wonder at their apparent unusualness.[51] For Pliny, however, perpetual change and variation in the very fabric of terrestrial nature can make explanation itself inexact and open-ended. Wonders in such an environment will, literally, never cease. By this he is not suggesting that humanity should allow itself to be dazzled and stunned by the world around it to the extent of abandoning all attempt at rational understanding. Instead, he suggests that the key to understanding the sub-lunar world is to recognise its volatility and variety, the mark of a guiding force manifesting on a larger scale those features which, as we have already seen, gave the human mind its power and subtlety: *uelocitas, celeritas, uarietas* (*HN* 7.52). To understand nature for Pliny is to understand that wonder and explanation can knit together in a never-ending circle of intellectual curiosity, rather than presenting the inquirer with a simple and finite one-way journey from wonder to explanation. This is the essence of reality, of consciousness, of being truly alive.[52] To replace definitively a 'wondered-at' world with a 'fully-explained' world would only encourage a sleep of the mind and the destruction of the essentially vitality of Plinian *uita*.

Epilogue: A Nineteenth-century Eye-opener

The culture of wonder probably reached its apogée in the seventeenth century. By the nineteenth century, it was unlikely to be officially acknowledged as an essential stimulus to scientific inquiry.[53] Yet its surreptitious influence can be detected in the every-day lives of the most

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[50] *Quid quod mutantur saepe iudicata quoque et diu conperta?*, 'What of the fact that changes often occur even in things that have been investigated and ascertained long ago?' (*HN* 17.30).

[51] Strabo 1.3.16–21. See above, pp. 80–81.

[52] Wonder can also lead, consciously or not, to moral reflection. Pliny frequently exclaims wonderingly at excesses of luxury (see Carey (2003) 91–101); the portrayals of the wondrous races may encourage readers to 'see' their own customs in a new light (Murphy (2004) 94–95).

[53] For the transformations of wonder in the Enlightenment, see Daston and Park (1998) 329–363; by the early twentieth century, 'one may enter a scientific career through wonder. But one cannot persist in wonder, at least not in public before one's peers' (op. cit. 367).

rational. Take the anatomist Richard Owen, for example, whose second Hunterian lecture in 1837 excoriated Pliny for including in the *HN* not a single proper fact, apart from the few culled second-hand from Aristotle, about the elephant and 'those rarer animals which more extended conquests brought within his reach and observation'.[54] In the first lecture of the series (1.19), Owen had described his own particular specialty, comparative anatomy, as 'a science of pure observation'. The physical eye was clearly as important to him as it was to Pliny, but as an observer according to Owen's definition, Pliny was clearly a non-starter. And yet, outside the lecture theatre or the laboratory, Owen exhibited an attraction to the wondrous which brings him far closer to the criticised Pliny than he would have cared to admit. His grandson and biographer claimed that, like his son after him, he enjoyed 'visiting strange folk and curiosities of his own species'.[55] These included, according to his wife's diary for April 4th, 1846, General Tom Thumb ('he came back amazed') and, on April 6th of the same year, 'an extraordinary case of a man's tooth growing right through his cheek and curving up like a walrus' tusk'.[56] In addition, he was frequently the recipient of natural oddities sent to him by friends and acquaintances who knew they would interest him.[57] On April 30, 1860, the novelist Charles Kingsley[58] sent Owen an adder with two hind

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54 2.79, ed. Sloane (1992). For Owen (ibid.), Pliny's work 'contains little more than a translation of Aristotle, interwoven with fabulous narrations which show how little he had imbibed of the true spirit of his master'.

55 Owen (1895) 1.282.

56 Caroline Owen's diaries are now lost: see Sloane (1992) 6. Quotations are from Owen (1895) 1.282.

57 However, he may have been anxious to avoid being labelled a curiosity collector. His grandson reports a letter to his sister in which he says he has 'never permitted' himself to start a private collection of these donations, but has always passed them on to scientific or learned establishments such as the British Museum or College of Surgeons (Owen (1895) 2.102). Yet his garden at Sheen Lodge had the aura of a previous era of such private collections: its contents included a seat made out of whale vertebrae, a crocodile skull, a plaster cast of an Egyptian figure and 'a few great bones repos[ing] against a tree ...' (2.261–262).

58 The letter, dated April 30, 1860, is recorded in Owen (1895) 2.101: 'My dear Professor Owen, I have got a wonder for you which has opened my eyes so wide that I cannot shut them again—an adder with two hind legs. They are one-half to three-quarters of an inch long, just behind the vent (like a tortoise's in form, but with irregular fangs or prickles, instead of nails). I can only describe it roughly, because I don't like to cut or finger it, but leave that for you. I suppose you would wish to have him and trace his "morphology". I have put him in spirits and will send him up. His slayers say he stood bolt upright on said legs and his tail "like a Christian", and sprang at them, which he may well have done. I can hardly believe my own eyes; but here he is in flesh and blood. Yours ever faithfully, C. Kingsley.'

legs.[59] 'I have got a wonder for you', he wrote, 'which has opened my eyes so wide that I cannot shut them again'. Pliny would have been delighted with this phrase. There was no place for torpor or ἀπάθεια / apathy in his world either. Wonders then and 2000 years later served to open the eyes and keep them open: *uita uigilia est* indeed.

[59] Some of the more primitive snakes, such as boas, can occasionally exhibit spurs, which are vestigial legs, on either side of their vents. In the case of the adder, however, Dr. Colin McCarthy, of the Natural History Museum, suggests that what Kingsley saw were protruding hemipenes, the intromittent male double sexual organs. These are frequently covered with spines which can be quite enlarged. To judge from a quick survey of internet illustrations, contemporary reception of this phenomenon supports Pliny's desire that explanation should fuel rather than banish wonder.

CHAPTER SIX

PHILOSOPHY AND SCIENCE IN THE ELDER PLINY'S *NATURALIS HISTORIA*

Ernesto Paparazzo

Introduction

Two other relevant contributions analyze key issues which make the *Naturalis Historia* such a characteristic artifact, that is, *curiosity* (Beagon, in this volume), and the sequential and hierarchical order with which Pliny describes the items relevant to *Natura* and Man (Henderson (2011)).[1] Here, I discuss the issue of philosophy and science. By philosophy I will mean the discipline to which both the ancient sources and modern scholars refer in the context of the Greco-Roman world. By science I will mean Pliny's accounts involving empirical observations, either direct or secondary, calculations and quantifications of natural objects, resources and phenomena, as well as any methods, procedures and activities concerned with the design, realization, administration, handling and use of substances and artefacts intended for practical purposes. As several scholars have used the term 'science' in connection with classical antiquity,[2] I feel that it can reasonably be discussed in connection with Pliny, provided due allowance is made for the lack in his day of both the equipment and the normative approach of modern science and technology.

Discussion of Pliny's science is already available in several studies which have analysed a great many accounts of the *HN* concerned with metals, minerals, chemical substances etc.[3] The 'philosophy' of Pliny has been discussed in other studies concerned with either his cultural

[1] There is a huge literature on general and specific aspects of the *Naturalis Historia*, and for a summary see Serbat (1986). Recent research is available in (e.g.) Citroni Marchetti (1991), Beagon (1992), French (1994), Healy (1999), Rottländer (2000), Naas (2002), Carey (2004), Murphy (2004), Beagon (2005).

[2] Kidd (1978) 7, Long and Sedley (1987) 161, Healy (1999) xi and *passim*.

[3] Bailey (1929–1932), French and Greenaway (1986), Healy (1999), Rottländer (2000).

background, or the interpretation of specific passages of the *HN*.[4] My approach is different here, because I will discuss the natures, functions and mutual relationships of philosophy and science in Pliny, and I will try to show that such an analysis offers a more accurate understanding not only of specific passages, but also of some of the general motivations underpinning his narrative. I will compare my analysis with the interpretations given by commentators on specific passages, as well as with their general attitude towards Pliny. I will finally examine Pliny's accounts within the cultural *milieu* of his day, and I will try to identify the sources which influenced his treatment of philosophical and scientific subjects.

The Evidence and Its Analysis

In his account of the two kinds of lead (*natura plumbi*, *HN* 34.156), i.e. lead proper (*plumbum nigrum*) and tin (*plumbum candidum* or *album*), Pliny says (*HN* 34.161):[5]

> A) Albi natura plus aridi habet, contraque nigri tota umida est. ideo album nulli rei sine mixtura utile est.
>
> The substance of white lead has more dryness, whereas that of black lead is entirely moist. Consequently white lead cannot be used for anything without an admixture of another metal.

This passage is difficult to understand. Indeed, the notion that the dry nature of tin makes this metal impossible to use, unless it is mixed with other metals, has no explanatory reference either in the immediate context of the passage, or elsewhere in the *Naturalis Historia*. None of the interpretations offered by modern commentators is satisfactory, and just as unsuccessful seems to be any attempt at finding a possible reference to the dryness of tin in the ancient sources of Greek philosophy up to Aristotle, who even says that 'silver *and* tin … contain water',[6] exactly the *opposite* of Pliny's statement in passage A.

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[4] Grimal (1986), Dumont (1986), Lapidge (1989) 1411–1412, Wallace Hadrill (1990) 84–90, Beagon (1992) 22–123, French (1994), Healy (1999) 71–78 and 106–112, Griffin (2007).

[5] Unless noted otherwise, all translations of the Pliny passages discussed here are those of Rackham, and taken from the relevant volume of the Loeb Classical Library edition of the *Naturalis Historia*.

[6] Arist. *Sens*. 443a20. A summary of ancient sources relevant to passage A and of the interpretations of it given by modern commentators is available in Paparazzo (2008) 43–44.

I have proposed elsewhere that Pliny could have been inspired by a Stoic source,[7] such as the following (DL 7.136 =*SVF* I.102 (part)):[8]

> A1) in the beginning he (God) was by himself; he transformed the whole of substance through air into water, and just as in animal generation the seed has a *moist* vehicle, so in cosmic moisture God, who is the seminal reason of the universe, remains behind in the moisture (ὑγρῷ) as such an agent, adapting matter (εὐεργόν) to himself with a view to the next stage of creation ... Thereupon out of these elements [*scil.* fire-air-water-earth] animals and plants and all other natural kinds are formed by their mixture (μίξιν).

Indeed, the notion stated in passage A1 that moisture (ὑγρῷ) is required for the creative process to occur (εὐεργόν) bears on the fact that the *natura plus aridi* of tin makes this metal impossible to work (*nulli rei ... utile*). Noteworthy also is the occurrence of *mixtura* in passage *A* and of μίξιν in passage A1.

In the same account of *natura plumbi*, a passage describing lead mines reads thus (*HN* 34.164–165):

> B) mirum in his solis metallis, quod derelicta fertilius reuiuescunt. hoc uidetur facere laxatis spiramentis ad satietatem infusus aër, aeque ut feminas quasdam fecundiores facere abortus.
>
> It is a remarkable fact in the case of these mines only that when they have been abandoned they replenish themselves and become more productive. This seems to be due to the air infusing itself to saturation through the open orifices, just as a miscarriage seems to make some women more prolific.

Even this passage is difficult to understand. Bailey suspects that the natural re-growth of lead minerals is just a matter of hearsay fantasies, although it could have some basis in fact. Indeed, galena (PbS, lead sulphide), the main ore mineral of lead could 'grow' into the heavier $PbSO_4$ (lead sulphate, another ore mineral for the extraction of lead), through incorporation of oxygen as a result of exposure to ambient air.[9] Rottländer (commenting on passage A) suggests that the liquid nature of lead should play a role in this wondrous phenomenon, but he does

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7 Paparazzo (2008) 44–45. The general aspects of Stoicism are discussed in, e.g.: Pohlenz (1978), Rist (1969), Long (1974), Rist (1978), Long and Sedley (1987), Sharples (1996), Algra *et al.* (1999), and Inwood (2003).

8 All the translations of passages from Diogenes Laertius are those of Hicks (2000).

9 Bailey (1932) 253. Gallet-de-Santerre and Le Bonniec (1953) 314 admit that Pliny's explanation could have a 'fond de vérité.' Delcroix (1996) 438 notes that 'Plinius himself did not believe all *paradoxa* without reserve but tried at least to understand and to explain some of them.'

not investigate this issue further,[10] and (commenting *ad locum*) that the passage follows the ancient tradition to liken natural resources to the fetus in the maternal womb.[11]

I note that both passages A and B involve some of the four elements of *natura* a (fire, air, water, earth) and their qualities. Elsewhere Pliny thus describes air (*HN* 2. 10):

> B1) Nec de elementis uideo dubitari quattuor esse ea ... spiritus, quem Graeci nostrique eodem uocabulo aera appellant, uitalem hunc et per cuncta rerum meabilem totoque consertum;
>
> As regards the elements also I observe that they are accepted as being four in number ... the vapour which the Greeks and our own nation call by the same name, air—this is the principle of life, and penetrates all the universe and is intertwined with the whole.[12]

Since *mixtura* in passage A has a philosophical connotation,[13] and Pliny follows the Stoic theory of this process when it involves the four elements,[14] I propose that Stoic views also influence passage B. Indeed, the Stoics held that air and fire were active elements, whereas water and earth passive, and that their mutual interactions were as follows (*SVF* 2.473 (part)):[15]

> B2) Fire and Air, being rare, light, and having tension, completely pervade Earth and Water which are dense, heavy, and lack tension.[16]

Stoic views of the nature and properties of the four elements had been known at Rome, at least as early as Cicero's time (*Acad. Pr.* 26):[17]

> B3) air (*aer*, this word also we now use as Latin) and fire and water and earth are primary: while their derivatives are the species of living creatures and of the things that grow out of the earth ....among them air and fire have motive and efficient force, and the remaining divisions, I mean water and earth, receptive (*accipiendi*) and passive (*patiendi*) capacity.

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[10] Rottländer (2000) 95–96 § 40.

[11] Rottländer (2000) 100–101 §§ 59–60.

[12] Lapidge (1989) 1412 notes that here *spiritus* has a Stoic character.

[13] Paparazzo (2008) 45.

[14] Paparazzo (2005) 370–373.

[15] Possibly inspired by Aristotle (Arist. *GC* 329b20–24, and Arist. *Mete.* 368a33, 378b10–12), this Stoic doctrine is given in *SVF* 2. 418. See also Lapidge (1973), (1978) 165.

[16] Transl. Todd (1976) 119. For comment see *id.* 193 and also Long and Sedley (1987) 292–294.

[17] Transl. Rackham (1956) 437.

The Stoics traditionally attached masculine and female connotations to that which is active and passive, respectively, and Chrysippus did not mind using obscene language in allegorizing Jupiter as god (the active principle), and Juno as matter (the passive principle).[18]

Pliny, too, underlines the active / masculine properties of air (*HN* 2.116):

> B4) winds—even their name being a masculine word (*mares appellatione*) ... or whether wind is the famous 'breath' that generates the universe by fluctuating to and fro as in a sort of womb (*ille generabilis rerum naturae spiritus huc illuc tamquam in utero aliquo uagus*).

Here 'breath' (*spiritus*) has a Stoic connotation, as also in the following passage (*SVF* 2.442):[19]

> B5) what is its [*pneuma*'s] motion in opposite directions at the same time, by which it holds together the bodies in which it is present, being, as they say, *pneuma* simultaneously moved into and out of itself?

This reminds one of *spiritus huc illuc ... uagus* in passage B4 above. We should also compare *generabilis ... in utero* in the latter passage with ὥσπερ ἐν τῇ γονῇ τὸ σπέρμα περιέχεται of passage A1 = *SVF* 1.102.[20]

Pliny also gives passive / feminine connotations to water, the moist element (*HN* 2.223):

> B6) The moon on the contrary is said to be a feminine and soft star (*femineum ac molle sidus*), and to disengage moisture at night (*nocturnum soluere umorem*) and attract, not remove it.

In light of all this, and given that passage B has a biological context (*feminas ... fecundiores ... abortus*), Pliny seems to use Stoic doctrine to account for the apparently inexplicable (*mirum*) re-growth of lead mines: the humid (passive / feminine) nature of lead is somehow fertilized by the active / masculine nature of *infusus aër* blowing into the mines through *laxatis spiramentis*.[21]

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[18] *SVF* 2.1074. For comment see Rist (1985) 43. The masculine connotation of air in the form of wind is implied in Verg. *G.* 3.272–275 *illae* [*scil. equae*] || ... *exceptantque leuis auras, et saepe sine ullis* | *coniugiis uento grauidae—mirabile dictu*. For Stoic influences on Vergil see Lapidge (1989) 1390.

[19] Transl. Todd (1976) 137. For comment see id. 219. See also Long and Sedley (1987) 286–289.

[20] Gould (1970) 121. See also Lapidge (1978) 166, id. n. 12 above.

[21] Stoic cosmology has a pronounced biological character, see Long and Sedley (1987) 279, Hahm (1977) 62–63, Rist (1985) 27–47, (1989).

Interestingly, in both passages A and B Pliny is interested only in *philosophical* notions, such as the different *natures* of tin and lead and their *mixture* with other substances, but not in the empirical, quantitative or technological details needed for the practical manipulation and use of the two metals. The latter details are the subject of several other passages:

1. Of this substance [*scil.* black lead] the liquid that melts first (*primus*) in the furnaces is called *stagnum*; the second liquid (*secundus*) is argentiferous lead, and the residue left in the furnaces is impure lead which forms a third part (*tertia portio*) of the vein originally put in; when this is again fused it gives black lead, having lost two-ninths (*nonis II*) in bulk. (*HN* 34.159)
2. At the present day a counterfeit *stagnum* is made by adding one part (*tertia portione*) of white copper to two parts of white lead; and it is also made in another way by adding equal weights (*libris*) of white and black lead. (*HN* 34.160)
3. Silver cannot be soldered with tin, because the silver melts before (*prius*) being soldered. And it is directly verified that, when the amount of lead admixed with silver is less (*minus*) than needed, the silver is damaged by the tin.[22] (*HN* 34.161–162)
4. It is a test (*experimentum*) of white lead when melted and poured on papyrus to seem to have burst the paper by its weight (*pondere*) and not by its heat (*calore*). (*HN* 34.163)
5. It is also remarkable that vessels made of lead will not melt (*liquescere*) if they have water put in them, but if to the water a pebble or quarter-as coin is added, the fire burns through the vessel. (*HN* 34.165)

As can be seen, Pliny treats the subject of *natura plumbi* using both the approaches of *philosophy* (passages A and B) and *science* (passages 1 to 5)—but separately. Such a separation conforms to a Stoic methodological principle, according to which both philosophers and scientists are engaged with the study of the universe, but their subject matter is distinctively different.[23] Posidonius gives a detailed account of this approach in fragments F18EK and F90EK,[24] which were enlighteningly analyzed by

[22] Transl. Paparazzo (2003) 529.
[23] See DL 7.132–133. This passage is discussed in Long and Sedley (1987) 266–268, Kidd (1988) 134–135, Hankinson (1998) 333–334.
[24] Posidonius' fragments discussed here are from the collection established and edited by Edelstein and Kidd (1972), and all translations are those of Kidd (1999).

Kidd, and the most important features of his interpretation can be summarized as follows.[25]

i. The subject matter of philosophy regards first principles such as substance, cause, properties etc. involved in the phenomena, whereas that of science regards calculations and quantifications relevant to the observation of the same phenomena. In particular (F18EK), the scientist (e.g. the astrononomer) must take principles (ἀρχὰς) from the natural philosopher.
ii. In F90EK Posidonius states that the 'special sciences' such as mathematics, geometry etc., are *not* part of philosophy, but only auxiliary tools to it: 'Mathematics provides us with a certain service, so it is more necessary to philosophy than the instrument maker is to it, but it is no more a part of philosophy than the instrument maker is a part of it.' In other words, philosophy and science (mathematics) each has its own field, i.e. the search for the causes of physical phenomena, and the quantitative aspects relevant to them, respectively. However, in order to operate, he [*scil.* the scientist] must be granted certain premises: but no art is its own master which depends on a borrowed foundation … Philosophy seeks nothing from any other source, it starts its whole work from ground up. The mind is perfected by one thing only, the unalterable knowledge of good and evil (*scientia bonorum ac malorum immutabili*); and the exclusive search for good and evil belongs to no other art than philosophy.

More than any other Stoic, Posidonius emphasized the assistance which 'science' offers to 'philosophy', but the latter has a guiding role over the former.[26] And in Pliny, too, we find a separation which is just as sharp. Moreover, while the philosopher investigates the phenomena through 'ἀπόδειξις—deductive proof from first principles, not empirically, the data of observed facts are indeed essential to help form the scientist's hypotheses.'[27] Pliny seems to give us an example of this scientific approach through the metallurgist's observations and hypotheses, the aims of which are as follows.

[25] General comments on the two fragments are in Kidd (1975). F18EK is commented upon in Kidd (1988) 129–136, and F90EK in id. 359–365.
[26] Kidd (1975) 14.
[27] Kidd (1975) 12.

i. To separate lead metal from by-products as a function of temperature and time in the purification of the mineral ore (passage 1).
ii. To establish the appropriate proportions with which tin and lead must be alloyed (passage 2), with a view to, e.g., soldering silver objects (passage 3).
iii. To test the mechanical properties of tin and lead at temperatures close or above to their melting point (passages 4 and 5, respectively).

It is worth stressing that as *none* of the scientific passages 1 to 5 contain a philosophical issue, so *neither* philosophical passage A or B deals with scientific issues. Although Pliny's separation between philosophy and science is so sharp, commentators have usually missed it and its Stoic character. A possible reason is that Posidonius' views on science and philosophy have been often misunderstood, even in recent times,[28] and their influence on Pliny (as well as Seneca) neglected, apart from a few exceptions.[29] Generally speaking, the lack of acknowledgement of this Stoic methodological approach has hampered the recognition of what in the *HN* pertains to philosophy and what to science. For example, Conte says that Pliny is the typical Roman writer (and reader) of a popular, low-graded science, that is, *scienza degradata*,[30] *fisica di partecipazione*,[31] and *fisica qualitative*.[32] In fact, Conte's usage of the term 'physics' in connection with classical thought is very ambiguous. It is not clear whether by that term he means the ancient equivalent of contemporary natural sciences, or one of the branches of the ancient classification of philosophy, first stated in the Early Academy: Physics, Logic and Ethics.[33] Such ambiguity even seems to affect Conte's lament that Pliny inherited from Greek science a sort of inhibition in using mathematical physics (*fisica matematica*) for the study of the sub-lunar world. Indeed, Conte

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28 Isnardi Parente (1993) 154–156, and n. 78, misses the significance of F90EK. Russo (2001) 214–216 apparently assumes that fragment F18EK is evidence for the thought of Geminus (who is just a reporter of Posidonius' thought), and not of Posidonius himself. A general confusion between the nature and tasks of *disciplinae* and philosophy also occurs in Della Corte (1970) 217–232.

29 See the monumental Vottero (1998) on Seneca's *Natural Questions*, especially 362–363 n. 5. See also the study by Lapidge (1989) on the Roman reception of Stoic cosmology, especially 1398.

30 Conte (1982) xx.

31 Conte (1982) xxvi.

32 Conte (1982) xxvii.

33 Sext. Emp. *Math.* 7. 16–19 = FEK88. The passage and its translation can be found in Bury (1997) 8–11.

argues, for the ancients it is the heavens which are the realm of perfection and eternity, and as such, akin to the laws of geometry, whereas the sub-lunar regions, i.e. the territory of the coming-to-be and passing-away are subjected to the limits of the 'more or less', and not to the exact rules which govern mathematical objects.[34] In fact, Pliny's Stoic sources contemplated the following:

i. That the heavens and the earth share the very same ontological destiny, as both are subjected to generation and destruction, as well as to cyclic conflagrations, a phenomenon which Pliny was aware of.[35]
ii. That terrestrial phenomena are *not* of less interest than heavenly phenomena. Stoic physics is in itself divine (*SVF* 1.44), and in fragment F90EK Posidonius addresses equally studies concerned with both *astronomical* bodies (*qua ratione constent caelestia*) and *earthly* bodies—how their image is reflected from a mirror (*quantum abesse debeat corpus ab imagine et qualis forma speculi quales imagines reddat.*).[36]
iii. That it was philosophy, not geometry, which first invented the notions of point, line, surface and solids, which are 'the roots and the bases' of mathematical objects (*SVF* 2. 99). However, there is no evidence that such 'philosophy-rooted' geometry should apply only to celestial phenomena and not terrestrial phenomena.

I suggest that the comparatively poor accuracy of ancient studies of terrestrial phenomena was in fact due to objective experimental reasons, and not to a subjective inhibition. Indeed, a study of celestial mechanics can be treated more or less as a geometrical problem (the debt of ancient astronomy to geometry is well documented),[37] because: (a) the dimensions of, e.g., the planets can be assumed to be point-like relative to the distances involved, and (b) virtually no ambient-induced resistance phenomena affect their locomotion in the void cosmic space. On the contrary, neither approximation (a) nor (b) is allowed in terrestrial mechanics. Scholars also contend that the material of the *NH*

[34] Conte (1982) xxix.
[35] *HN* 7.73; see Beagon (2005) 253, and cf. *SVF* 2.613–617. Among the Stoics Boëthus Sidonius makes an isolated exception: he held that the sphere of the fixed stars is the substance of god (*SVF* 3.[BS]3), and—together with Panaetius—he rejected the tenet of the conflagration (*SVF* 3.[BS]7).
[36] Kidd (1988) 359–365.
[37] Hankinson (2003) 289–292.

is poorly arranged, being organised in accordance with practical reasons rather than systematic criteria.[38] However, it should be noted that the sequence of the topics in the *HN* (God, the four elements, the universe, stars, planets, etc.) does not differ substantially from that followed by Diogenes Laertius in his account of the Stoics.[39] (For a powerful and detailed analysis of the structure and organization of the *HN* see Henderson (2011).)

Another interesting passage occurs in Pliny's account of the bees (*HN* 11.29):

> C) sexangulae omnes cellae a singulorum pedum opere
>
> All the cells are hexagonal, each side being made by one of the bee's six feet.

Commentators have unanimously criticized Pliny for this passage, because: 'Il n' est pas besoin de souligner l' absurdité de cette explication'[40] and his statement is 'palesemente assurda',[41] and 'of course there is no relation between the facts that the cells are hexagonal and that the bee has six feet',[42] and also 'Pliny does not have the philosophical apparatus to make the acquisition of empirical knowledge', and that most of the information 'is close again to an oral tradition'.[43] Modern scientists do not seem to appreciate Pliny's mathematical skills any better. Cini says that in the 4th century AD Pappus would give the geometrical explanation of the hexagonal shape of the cell, whereas Pliny's statement is just a matter of mere fantasy.[44] True, Pappus explains that 'the hexagon is greater than the square and the triangle and will hold more honey for the same expenditure of material in constructing each',[45] and he showed that the bees solved a problem of isoperimetry, i.e. how the surface and volume of a geometrical figure relate to each other.[46] According to Russo, Pliny's statement is an oversimplified version of the mathematical explanation which he was incapable of understanding. However, he may have known something of the geometrical issues associated with the hexagonal shape

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[38] Della Corte (1982), Conte (1982) xliii n. 1.

[39] See especially DL 7.35–42. This section and its translation can be found in Hicks (2000) 238–247.

[40] Ernout and Pepin (1957) 31.

[41] Borghini, Giannarelli and Marcone (1983) 559.

[42] König and Hopp (1990) 189.

[43] French (1994) 251.

[44] Cini (2001) 9.

[45] Pappus *Coll.* 5 304.1–308.8. Translation and commentary in Cuomo (2000) 57.

[46] Cuomo (2000) 58.

of the cell, since he was in a way fascinated by Hellenistic scientific treatises.[47] Such texts, Russo continues, had been completely neglected by Varro in the 1st century BC, whom he takes to be the typical Roman representative of a pre-scientific culture which allowed no room for theories other than philosophy.[48] As far as the hexagonal shape of the cell goes, such an assertion is patently contradicted by the following evidence (*Rust.* 3.16.4–5):[49]

> C1) Does not the chamber in the comb have six angles, the same number as the bee has feet? The geometricians prove [*geometrae* … *ostendunt*] that this hexagon inscribed in a circular figure encloses the greatest amount of space.

Indeed, here Varro is merely repeating (actually, anticipating) Pappus' explanation from a Hellenistic source,[50] and it is indeed hard to believe that Pliny did not know Varro's reference to such geometrical demonstration, since the latter is a chief *auctor* for book *HN* 11. I therefore think that Pliny's omission of the geometrical explanation arises from other reasons.

i. He takes pains to give rather exhaustive accounts only of those scientific procedures or observations that could be carried out by man himself (see passages 1 to 5), and this is certainly not the case with the construction of the honeycomb.
ii. Pliny's main interest here is in the *prouidentia* of *natura* (a philosophical issue), and the geometrical properties of the hexagon (a scientific issue) are totally foreign to it. In other words, he underlines the Stoic-influenced supremacy of philosophy over science, by reminding us that it is philosophy which finds out that Nature's *pronoia* makes the bee offer mankind the greatest amount of honey,[51] whereas science can only demonstrate that a hexagonal cell accomplishes this.

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47 Russo (2001) 258.

48 Russo (2001) 257–258. Also, Della Corte (1970) 217–219 thinks that Varro used the *disciplinae* as the Roman practical equivalent of the Greeks' search for the truth, and that he included philosophy as part of the canon of the *disciplinae*. However, this is in sharp contrast with the evidence we have. For an accurate account of Varro's *disciplinae* see Cipriani (2000), and Shanzer (2005).

49 Transl. Hooper (1999) 501.

50 To my knowledge, Aristotle never addressed the question of the hexagonal shape of the cell, not even in the works containing detailed accounts on the bees, such as *HA*, *PA* and *GA*.

51 At *HN* 11.11 Pliny reminds us that among all insects the bees occupy the chief place

In the section devoted to the diamond (*adamas*) Pliny reports a remarkable phenomenon associated with this material (*HN* 37.59–60):

> D) siquidem illa inuicta uis, duarum uiolentissimarum naturae rerum ferri igniumque contemptrix, hircino rumpitur sanguine, ... cuius hoc inuento quoue casu repertum? aut quae fuit coniectura experiendi rem inmensi pretii in foedissimo animalium? numinum profecto talis inuentio est et hoc munus eo, nec quaerenda ratio in ulla parte naturae, sed uoluntas!
>
> This unconquerable force that defies Nature's two most powerful substances, iron and fire, can be broken up by goat's blood ... what inference could have led anyone to use the foulest of creatures for testing a priceless substance such as this? Surely is to divinities that we must attribute such inventions and all such benefits. We must not expect to find reason anywhere in Nature, but only the evidence of will.[52]

Eichholz comments that it is 'of course, untrue' that goat's blood could ever break the diamond up.[53] Conte says that by his resignation to *uoluntas* Pliny neglects the search for the cause of the phenomenon.[54] Stoic doctrine, again, seems to shed some light on clarifying this issue Chalcid. *in Tim.* 144 = *SVF* 2.933 (part):[55]

> Thus some (*scil.* the Stoics) believe it to be an assumption that there is a difference between providence and fate (*prouidentiae fatique*), the reality being that they are one. For providence will be god's will (*dei fore uoluntatem*), and furthermore his will is the series of causes (*causarum*). In virtue of being his will it is providence. In virtue of also being the series of causes it gets the additional name 'fate'.

I argue that, since in passage D Pliny refers to *uoluntas* as an explanatory appendix to the divine origin of the phenomenon (*numinum ... inuentio*), he is attaching a Stoic meaning to this term: certainly not an a-critical, irrational resignation to the unknown and the wondrous, but a technical, philosophical notion which bears on fate, providence and cause. And, as we have seen above in connection with fragments F18EK

(*principatus apibus*) because they play the most providential role for the sake of man. Lapidge (1989) 1390 notes that in Vergil's phrase *esse apibus partem diuinae mentis et haustus* | *aetherios dixere* (*G.* 4.220–221) there is clear evidence for Stoic doctrine.

52 Transl. Eichholz (2006) 211.

53 Eichholz (2006) 210.

54 Conte (1982) xxxi.

55 Transl. Long and Sedley (1987) 331. See also Kerferd (1978) 132. Stoic doctrine often expressed one single ontological entity or process with several concepts, a feature which scholars have usually referred to as Stoic *nominalism*. See, e.g. Lapidge (1973) 240–242, White (2003) 134–135. For the Stoic definition of cause see e.g. *SVF* 1.89.

and F90EK, the Stoic held that the search for causes (including the causes of natural phenomena) is the task of the philosopher, not of the scientist.

Seneca provides further evidence that the Stoics related the cause of everything which happens to god (Sen *Ep.* 65.4 and 11 = *SVF* 2. 346a (part)):[56]

> Do we ask what cause is? To be sure, it is reason in action, i.e. god (*id est deus*). For all these things you people have cited are not many distinct cause; rather, they depend on one, the active cause.

This point is apparently missed by French: 'but it is sufficiently bizarre for Pliny in a rather un-Stoic way to rhetorically call it the work of god rather than a reason of nature.'[57] I also note that the role of deified nature (*natura* = god),[58] and its proceedings (*ulla parte naturae, sed uoluntas*) could also be that of levelling a priceless (*immensi pretii*) material like diamond with the foulest (*foedissimo*) of animals, contrary to the value scale with which human greed ranks the two articles. This is not a merely rhetorical 'symmetry' argument, as discussed by Wallace Hadrill and French;[59] Pliny here seems in fact to imply that Nature is not only an ontological, physical entity, but also a normative, moral principle. Indeed, the Stoics held that the account of Nature corresponds to the account of 'what is and should be the case … what Nature *willed* to happen.'[60]

To further discuss the relationships between ontological and normative issues in the *HN* let us consider the following passages from the account of iron:

> E) The same benevolence of nature has limited the power of iron itself by inflicting on it the penalty (*poenas*) of rust, and the same foresight (*prouidentia*) by making nothing in the world more mortal than that which is most hostile to mortality. (*HN* 34.141)
>
> E1) Human blood takes its revenge from iron, as if iron has come into contact with it, it becomes the more quickly liable to rust. (*HN* 34.146)
>
> E2) Iron serves as the best and the worst (*optumo pessimoque*) part of the apparatus of life … we employ it for all other useful purposes but likewise use it for wars and slaughter and brigandage …. Let us therefore debit the blame (*culpa*) not to Nature, but to man. (*HN* 34.138–139)

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56 Transl. Inwood (2007) 12.
57 French (1994) 239.
58 Beagon (1992) 33.
59 Wallace Hadrill (1990) 84, French (1994) 239.
60 Long (1996) 147.

These passages are reported in an order which differs from their actual occurrence in the text so as to emphasize an interesting transition of their subject matter. Indeed, both passages E and E1 are philosophical in character—of the kind we have discussed so far, and they are concerned with physics because they involve the change (μεταβολῆς, in F18EK) iron undergoes when it turns into rust, as well as *prouidentia* of nature (προνοίᾳ) a topic, again, dealt with by ὁι φυσικόι,[61] which limits or counteracts the obnoxious effects of this metal. Again, Pliny follows Posidonius' methodological approach, as these *philosophical* passages are accompanied by a long *scientific* section (*HN* 34.142–152) concerned with the extraction and refinement of iron, its manufacture, and its use in medicine. Conversely, passage E2 addresses, in connection with iron, the problem of the good (*optumo*) and evil (*pessimoque*) and how the latter reflects on man (*culpa*). The same problem is also addressed in analogous passages concerned with other materials such as gold, silver and gems:

> E3) *Pessimum* uitae *scelus* fecit qui primus induit [aurum] digitis (*HN* 33.8)
>
> The *worst crime* against man's life was committed by the person who first put gold on his fingers.
>
> E4) Proximum *scelus* fuit eius, qui primus ex auro denarium signauit (*HN* 33.42)
>
> Next in degree was the *crime* committed by the person who first coined a gold denarius.
>
> E5) Ab his argenti metalla dicantur, quae sequens *insania* est (*HN* 33.95)
>
> After these details let us speak about the varieties of silver ore, the next *madness* of mankind.
>
> E6) Lapidum natura restat, hoc est praecipua morum *insania* (*HN* 36.1)
>
> It remains for us to deal with the nature of stones or, in other words, the prime *madness* in our behaviour.

I argue that *also* passages E2 to E6 are philosophical in character, and they are concerned with ethics. The last section of Posidonius' fragment F90EK states that the ultimate goal of the mind is the 'unalterable knowledge of good and evil' and that only philosophy achieves it. 'Good and evil' is the subject matter of ethics, one the three departments of Stoic philosophy whereas all the preceding section of the fragment involves

[61] See for instance DL 7.133, 7.139.

physics (and science). By this sequel Posidonius is asserting that physics' main task is to serve as a basis for moral behaviour, and among the Stoics he painstakingly stressed that physics, ethics (and logic) are the *organically inseparable* parts of philosophy.[62] These Stoic influences have been apparently missed by commentators because it is just in passages such as E2 to E6 that they find Pliny at his worst, and they take his ethics-related comments to be an indicative proof of his poor scientific reliability. For instance: 'Il est surprenant de rencontrer dans un ouvrage "scientifique" des *sententiae* sur le luxe (§§ 160 et 163), ou les antitheses faciles du grand development rhetorique sur le fer, ses bienfaits et ses crimes (§ 138).'[63] Also: 'It is a mistake to evaluate his [Pliny's] botany or zoology. These are categories of modern science, and science does not seek to instruct morally.'[64] Conte finds that Pliny is a learned archivist who at times stops filling in the meticulous list of natural objects to air his moralistic urge.[65] Wallace Hadrill thinks of 'Pliny's use of the nature / luxury antithesis as a strategy. He is a crusader, attempting to sell science to a highly resistant Roman audience.'[66] Citroni Marchetti, on the other hand, interprets his moralistic comments as stemming from rhetorical motivations, and that 'the moralizing tone overlaps with his scientific descriptions, and such a combination produces ambiguities.'[67]

A common basis which underpins these criticisms is that moralistic considerations are totally out of place in naturalistic accounts concerned with, e.g., metals. Such criticisms would be justified, were they directed at a treatise of contemporary science, not at a text like the *Naturalis Historia* which is characteristically inspired by Stoicism. It seems that the concern with Pliny's lack of scientific rigour makes the interpretation of his motivations problematic. As we have seen above, at the end of F90EK Posidonius states that the main task of physics is to offer a basis for ethics, and this is only one of several pieces of evidence on that matter.[68] For

[62] F88EK. For comment see Kidd (1988) 352–355, (1978) 273–278. For Stoic physics, see Lapidge (1973), and White (2003); for Stoic logic: Mates (1953), Frede (1978), Barnes (1997), and Bobzien (2003); for Stoic ethics: Kidd (1955), Long and Sedley (1987) 344–437, Long (1996), and Schofield (2003).

[63] Le Bonniec and Gallet de Santerre (1953) 97.

[64] French (1994) 231.

[65] Conte (1982) xxvii.

[66] Wallace Hadrill (1990) 95.

[67] Citroni Marchetti (1991) 28.

[68] See e.g. *SVF* 3.68, *SVF* 3.69, *SVF* 3.281, *SVF* 3.282, F88EK, F186EK, and DL 7.87–89.

instance, from a source inspired by Chrysippus, the most influential Stoic philosopher, we learn that (Plut. *Mor.* 1035C–D = *SVF* 3.68 (part)):[69]

> There is no other or more appropriate way of approaching the theory of good and bad things or the virtues or happiness than from the universal nature and from the administration of the world ... physical speculation is to be adopted for no other purposes than for the differentiation of good and bad things.

Moreover the three departments of Stoic philosophy are all intimately connected with each other,[70] and for that reason they were taught all together, and in particular physics and ethics are strongly and pervasively related to one another. From this evidence scholars concluded that the Stoics always prefaced moral questions with some physical explanation or relation to physics,[71] and for them nature was an evaluative category that served as a basis of ethical theory.[72] Also 'they sought to derive ethics from physics, the inquiry into the Nature of sensible objects', Nature for them 'is first and foremost a normative, evaluative, or if you will, a moral principle', and the phrase *according to Nature* is 'primarily an evaluative expression, and secondarily a factual one.'[73]

Stoicism (or Roman Stoicism?) in the Naturalis Historia

In light of all this, there are good reasons for believing that the ethical considerations in passages E2 to E6 (and in many other analogous passages) are inspired by Stoic sources, as for Pliny too ethics relies on physics. For instance, in passage E6 natural objects (*lapidum*), that is, the subject matter of physics, directly relate (*hoc est*) and reflect on an aspect of *morum* (insania), that is, the preserve of ethics. To express this relation Pliny uses a very scanty and plain terminology which could be intelligible even to humble readers (*humili uulgo*, *HN* pref. 6), as they would not follow the technicalities of Stoic logic needed to substantiate such relation.[74] I feel that Pliny's reference to ethics is nonetheless inspired

[69] Transl. Long and Sedley (187) 368–369. See their commentary at op. cit. 374.
[70] See DL 7.40.
[71] Kidd (1955) 187.
[72] Todd (1978) 138.
[73] Long (1996) 136–147.
[74] Logic, one of the three organically inseparable parts of Stoic philosophy (FEK88), is indeed essential to validate the argument that ethical choice must stem from knowledge of physical resources and phenomena, see Long (1996). Stoic logic was known at Rome

by Stoic philosophy, and not just by rhetorical purposes. And the Stoics (and Pliny) would never hold that an ethics-driven study of *natura* is something different from knowledge: in fact, for them this is the most useful and logical way of achieving knowledge. It seems, therefore, that Conte's comment that Pliny is the typical ancient thinker whose physics (i.e. the study of *natura*) cannot be *episteme* but only *praxis* (a term standing for 'practical, technological activities') is, again, ambiguous.[75] Indeed, the Stoics held that *episteme* is a pure good (*aplôs agathon*) and *agathon* is by definition a moral notion.[76] Furthermore, disappointing as it may be to our methodological expectations, the ancient 'special science' corresponding to contemporary physics was a combination of the *disciplinae* called *pueriles* or *liberales* (the Greek *egkuklioi*, which Pliny knew well, *HN* pref. 14), whereas the 'physics = *praxis*' referred to by Conte would fall under the heading of the *uulgares*, or even the *sordidae*.[77]

What does really worry a Stoic (and Pliny) is separating the behaviour of the human animal from *natura*,[78] lest the harmony between the individual and the whole should break up.[79] As *natura* is the ultimate subject matter of the *scientia bonorum ac malorum*, the *HN* does not entail just a mere *enumeratio chaotica* of all the items contained therein;[80] rather, one of the main reasons for its encyclopaedic scope—[*dare*] *omnibus uero naturam et naturae sua omina* (*HN* pref. 15)—seems to be an effort at moral instruction. If the results of Pliny's enterprise compare unsatisfactorily with the standards of contemporary science, that is a completely different question. In other words the *Naturalis Historia* undoubtedly offers paradigmatic evidence for the pitfalls of ancient science;[81] but if we concentrate our analysis on this aspect only, we risk losing sight of Pliny's sources and motivations. Since he aimed to be of service (*utilitatem iuuandi*) to his fellow-citizens, not to enjoy popularity (*gratiae*

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in Pliny's day, see Barnes (1997), and he himself must know a good deal of it, see below n. 86.

[75] Conte (1982) xxx.

[76] DL 7. 98; cf. Cic. *Parad.* I.

[77] Sen. *Ep.* 88. 21 = F90EK. Kidd (1988) 359–360. For the *disciplinae* in Pliny, see Beagon (1992) 11–12, 17.

[78] *rerum natura, hoc est vita narratur* (*HN* pref. 13). See Beagon (2005) 21; cf. DL 7. 89.

[79] *SVF* 3.4; see Kerferd (1978) 127, Schofield (2003) 245.

[80] Conte (1982) xx.

[81] As noted by Lloyd (1999) 223–224, in antiquity experimentation was not aimed at finding the cause of a natural phenomenon, which is a major criterion of modern science. See, in general, Lloyd (1995) 215–284, and for Pliny, Lloyd (1983)135–149.

placendi),[82] I feel that it is more interesting to unveil the Stoic-inspired routes he went along to accomplish his task, rather than dismiss him as a scientific reporter, especially when the dismissal originates from a poor interpretation of his accounts.[83] I am not maintaining that he was an adept, scholarly competent follower of Stoicism. However, as a member of the Roman upper-class of the first century AD, he was inevitably exposed to the appeal of this doctrine,[84] which was the dominant philosophy at Rome in his day,[85] and his training in grammatical studies must have provided him with further, straightforward technical knowledge of it.[86] Notwithstanding, Colish is so little impressed as to find Pliny's interest and competence in Stoicism disappointingly limited,[87] whereas other scholars have granted him a generic, amateurish engagement with this philosophy.[88]

But Pliny's philosophical interests have been associated with another area of scholarly criticism, that of the so-called 'Roman Stoicism'. Possibly influenced by Pohlenz' view that during the Imperial period the Romans saw in Stoicism just a practical way of living, several scholars used the phrase 'Roman Stoicism' to mean a peculiarly reduced, if not even modified version of the that philosophy.[89] Such a view has been strongly questioned, however.[90] A careful analysis of texts dating from the 1st century BC to the 3rd century AD shows that 'Roman' has, in fact, the meaning of a historical phase of 'Stoicism' rather than of a modification or deterioration. True, Stoicism had proved a suitable reference for the past *mos maiorum* which accompanied and favoured the birth and growth of Roman power,[91] and in Pliny's day the recipients of the *Pax*

[82] *HN* pref. 16.

[83] For a general survey of a careful and accurate evaluation of Pliny's 'scientific' output see Healy (1999). For specific cases see, e.g., Vittori (1979) and Paparazzo (2003).

[84] Beagon (1992) 50, (2005) 15. For Pliny and Stoicism, see also Beagon and Fear in this volume.

[85] Long (2003) 207.

[86] Although it might bear on the theme of 'power' referred to by Murphy (2004) 17, Pliny's *Dubius Sermo* was most of all a work which lay in the vein of the Stoic grammatical tradition; see Barwick (1957) 110–111, Della Casa, (1969) 11–31. It was focused on the *ambiguity* of discourse, a topic which was addressed by Chrysippus (DL 7.193) in as many as seven works. See Atherton (1993) 28–33, 46–47, Frede (1978) 30, 42–45.

[87] Colish (1985) 334.

[88] Grimal (1986), Dumont (1986), Lapidge (1989) 1411–1412, Beagon (1992) 16–17, 47–48, 88, Griffin (2007).

[89] Pohlenz (1978) 34.

[90] Inwood (2006).

[91] For instance, Long (2003)193 'in the *De Officiis* he turns to Stoicism for the moral

Romana still found in Stoicism a valid inspiration and support for facing the political and cultural needs of the Empire, as it offered a 'guiding ethical framework for political involvement'.[92] However, *all* three departments of the Stoic *curriculum* were addressed in Rome from the late Republican years until the 3rd century AD.[93] In particular, Cicero, Seneca, Musonius, Epictetus and Marcus Aurelius all concentrated on practical ethics—which is not a *Romanisation* of Stoic ethics, but part of the genuine, historical tradition of that school since the times of Zeno and Chrysippus.[94] In reporting Stoic thought, thus Cicero describes at Rome the tight link which relates physics and ethics in that philosophy (*Fin.* 3.73 = *SVF* 3.282 (part)):[95]

> The same honour [*sc.* to be considered as a virtue] is also bestowed with good reason upon Natural Philosophy (*physicae*), because he who is to live in accordance with nature must base his principles upon the system and government of the entire world. Nor again can anyone judge truly of things good and evil, save by knowledge of the whole plan of nature and also of the life of the gods.

Scholars, however, did not exempt Pliny from the *cliché* of 'Roman Stoicism'. French thought that he, like most Romans, was not interested in the intellectual philosophy of the Greeks, and that his ethical thought was not that of a dedicated Stoic, whereas Murphy considers him the follower of a 'pragmatic Stoicism'.[96] But is Pliny's concern with moral action the usual, irresistible, rhetorical call of Roman practicality allegedly attributed to him by scholars? To answer this question, let us consider a passage from Seneca: 'the mind (*animus*) is focused on thought and action in a balanced manner (*cogitationibus actionibusque*

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re-armament he thinks the state needs in the aftermath of the civil wars', and op. cit. 199 'Cicero strongly approved that philosophy's focus upon rationality, social obligations and control of the passions.'

92 Gill (2003) 34, Beagon (2005) 25–29.

93 Gill (2003) 38, Sedley (2005) 117. Apart from the unfortunate lacuna of Varro's lost works, evidence for this is available in treatises on physics, such as Cornutus' *Summary of Traditions of Greek Theology*, Seneca's *Natural Quaestions*, Cleomedes' *Caelestia*. Stoic ethics was dealt with in Hierocles' *Elements of Ethics*. Moreover, Barnes (1997) discusses issues of Stoic Logic in Seneca, Epictetus and Marcus Aurelius.

94 Gill (2003) 40–43. For Cicero, see Mac Kendrik (1989); for Seneca, Rist (1989) and Inwood (2007); for Musonius, Laurenti (1989); for Epictetus, Long (2002); for Marcus Aurelius, Rist (1982) and Annas (2004). Stoic features in some of the writings of these authors active in Rome were analysed in De Lacy (1945).

95 Transl. Rackham (1951) 293.

96 French (1994) 214, 236, Murphy (2004) 11.

intentus ex aequo)' (*Ep*. 66.6).[97] The statement Seneca makes here, and in analogous passages,[98] about a life equally devoted to contemplation and action, is in fact a genuine form of orthodox, pure and simple Stoicism. Indeed (DL 7.130 = *SVF* 3.687):

> Of the three kinds of life, the contemplative, the practical, and the rational, they [*scil.* the Stoics] declare that we ought to choose the last, for that a rational being is expressly produced by nature for contemplation and action.

A reference to this Stoic indication occurs in the 5th century AD in Augustine in the following passage which is part of a discussion on how to attain the supreme good (*summum bonum*) as a way to the truly happy life (*uitam beatam*) (*De ciu. D*. 19.3):[99]

> Finally, of those three kinds of life, the inactive (*otioso*), the active (*actuoso*) and the composite (*ex utroque compositum*), they (*sc*. Old Academics) state that they prefer the third. That the Old Academic held and taught these doctrines Varro asserts on the authority of Antiochus (*auctore Antiocho*), Cicero's master and his own, although Cicero would have it that on a good many points he [*scil.* Antiochus] appeared to be a Stoic (*in pluribus fuisse Stoicum*) rather than an Old Academic.

Pliny's Sources

The Augustine passage is interesting because it informs us that the Stoic tenet that human life should be distributed equally into contemplation and action persisted in Rome through Antiochus of Ascalon. He was the founder and head of the so-called Old Academy, a sect in which he syncretically combined Academic, Peripatetic and Stoic thought as, he insisted, the differences between Plato, Aristotle and Zeno were in many important points terminological rather than substantive, although not all the boundaries had vanished.[100] Unfortunately, not a single line of Antiochus' writings has survived, but it is an established fact that he exerted a formidable influence at Rome in the 1st century BC.[101] This was probably a consequence of the institutional crisis suffered by Stoicism, which also had to come to terms with a re-emergent Platonism.[102] The

97 Transl. Inwood (2007) 16.

98 Inwood (2007) 161. Carena (1995) 209 also notes the occurrence of analogous Seneca's passages at *Ot*. 5.1, *Tranq*. 4.8, *Ep*. 3.6, 94.45.

99 Transl. Green (2001) 121.

100 Barnes (1989) 81, Hankinson (1998) 335–337, Sedley (2003a) 22, Gill (2003) 51.

101 Sedley (2003a) 23, (2005) 122.

102 Barnes (1989) 80, Sedley (2003a) 24–30, (2005) 118, 135.

presence of Stoic ideas in Antiochus, which made him a quite unique teacher, is documented not only in the Augustine passage above (*in pluribus fuisse Stoicum*), but also in several other sources.[103]

Antiochus had two quite illustrious disciples Cicero and Varro; and Varro, unlike Cicero, was persuaded by his teaching.[104] This information, which is confirmed by Augustine, suggests that Pliny's Stoic influences, including those from Posidonius, which I have discussed here may well derive from Varro, the most cited *auctor* of the *HN*, possibly from the lost *De Philosophia*, a book that Augustine, too, quotes as his own source for the passage at *De ciu. D.* 19.3.[105]

Although the most characteristic Stoic traits of Antiochus' teaching regarded epistemology,[106] he was himself interested in the Stoic relation between physics and ethics. For instance, Cicero informs us of Antiochus' views on those matters ('We must therefore penetrate into the nature of things (*in rerum naturam*), and come to understand thoroughly its requirements; otherwise we cannot know ourselves', *Fin.* 5.44),[107] and as part of a 'largely Antiochean speech' (*Acad. Pr.*14–42, at 19):[108]

> the chief good (*summum bonum*) which is the ultimate aim of all things is to besought in nature and in nature only … and complete accordance with nature in mind, body and estate is the limit of things desirable and the End of goods.[109]

It is worth stressing that if these Antiochean derivations can be accepted, they appear to have passed onto Pliny genuine Stoic traits. Indeed, it was just through Antiochus that much Stoic thought came to influence Roman culture from the 1st century BC onwards.[110] One example is the

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[103] See Barnes (1989) 78–79; Cic. *Acad. post.* 69 and 132. Also Sext. Emp. *Pyr.* 1. 235: "he does Stoic philosophy in the Academy."

[104] Barnes (1989) 61.

[105] The name of Posidonius occurs 4 times as a source for the *Naturalis Historia*, and is explicitly referred to twice, at *HN* 2. 85–87 = F120EK and *HN* 6. 57–58 = F212EK. Pliny also refers to him as *Posidonii sapientiae professione clari* at *HN* 7.112, which in the collection edited by Edelstein and Kidd (1972) 11 is listed as testimony TEK36. See also Beagon (2005) 302. For Varro's *De Philosophia* and Augustine reading of it at *De civ. D.* 19, see Hagendahl (1967) 621–627. Although Barnes (1989) 92 warns us that Augustine's historical record of the Academy is in several respects highly coloured and biased against Antiochus, the statement (*in pluribus fuisse Stoicum*) agrees with those by other ancient sources, see above n. 103.

[106] Glucker (1978) 13–97, Barnes (1989) 64–85, Hankinson (1995) 118–120.

[107] Transl. Rackham (1951) 443. See also Barnes (1989) 82.

[108] Barnes (1989) 81.

[109] Transl. Rackham (1956) 429.

[110] Sedley (2003a) 23.

Stoic doctrine that knowledge is an essential ingredient of the *summum bonum*, and that man has all the means to get at the latter using the former,[111] which is just one of the main messages which Pliny offers to his readers.

It should also be noted that the very syncretic nature of the same Antiochean influences makes Pliny's narrative receptive of long-standing ideas that run throughout Greek philosophy. Again, this is no Antiochean distortion of genuine Stoic ideas, but an emphasis on their Academic and Peripatetic derivation. In particular Pliny's methodological distinction between philosophy and science seems to have its ultimate source in 'the mathematician's total dependence upon hypotheses, and the philosopher's quest for un-hypothetical first principles', which are discussed in Pl. *Resp.* 510.[112] Such a methodological distinction seems also to be further reinforced by Peripatetic influences, as from fragment F18EK itself we learn that Posidonius took his 'starting points of exposition from Aristotle.'[113]

Concluding Remarks

Besides accomplishing the unprecedented gigantic task of addressing all the articles of *Natura* in a single work (*qui unus ea tractaverit*, *HN* pref. 14), Pliny should also be granted the distinction of having taken up the challenge of treating this subject matter using an extended Stoic approach which has no equal among writings ever put down in Rome, apart from Seneca's *Natural Questions*.[114] Indeed, as I have tried to demonstrate

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[111] Barnes (1989) 89.

[112] Long and Sedley (1987) 161.

[113] According to Kidd (1988) 129–130, these Aristotelian influences are in good part 'an expression of opinion on Simplicius' part', although the same scholar notes that the relationship between Physics and medicine is discussed in Arist. *Resp.* 193b23. See also Kidd (1988) 84–86. I would also add Aristotle's general discussion on the differences between philosophy and the special sciences at *Metaph.* 992a33–35, 1003a25–26, and 1025b3–18. A further influence from Aristotle seems also to contribute to *HN* 2. 1 where the phrase *mundum … aeternum … neque genitum neque interiturum* is something which the Stoics, who held that the cosmos is generated (see, e.g., *SVF* 2.574–578), would acknowledge as Peripatetic doctrine: *Aritoteles … dicens semper mundm fuisse … fuisse semper ac semper fore* (*SVF* 2.588). Indeed, Beagon (1992) 27 noted that in the *incipit* of *HN* 2 Aristotelian features add to Platonic and Stoic traits.

[114] This text also largely relates physics to ethics, a Stoic combination which, again, has often been missed (as in, e.g., Russo (2001) 259), but its subject matter—meteorological phenomena alone—is of a much more limited scope than that of the *HN*.

here, Pliny engaged both in physics and ethics, and this unexpected (and unrecognized) pattern is probably one of the main reasons why he was largely and repeatedly criticized. However, paradoxically, it seems that the resulting uniqueness of the *Naturalis Historia* was such as to make it immune to both the force of objections and the threats of time. In the end, the challenge Pliny took proved to be not so hazardous as he might have feared.

CHAPTER SEVEN

THE SCIENCE AND AESTHETICS OF NAMES IN THE *NATURAL HISTORY*[1]

Aude Doody

The *Natural History* is filled with names of animals, plants, minerals, places and people, some familiar, others unknown to all but the most expert of specialist readers. A great deal of scholarship over the years has depended on the correct identification of the things named in Pliny's text, and Pliny's importance to the practice of medicine in the West made the correct interpretation of Pliny's names a pressing problem for scholars well into the sixteenth century. Pliny's usefulness as a source of practical information depended on a proper understanding of the names he lists, on the ability of the reader to make the correct link between the name in the text and the object in the natural world. As we will see, the danger that names may become confused, that the reader may not be able to make the jump from name to object, text to world, is one that concerns Pliny throughout the *Natural History*. And yet, alongside a strong sense of the practical importance of understanding what is meant by a name, there is also what I would like to call an aesthetics of naming in the *Natural History*. Names are important within the text as structuring devices and as interesting facts in their own right, and Pliny chooses to list or exclude names for artistic and political as well as practical reasons. Pliny's use of names illuminates his expectations of his readers and his efforts to produce a text that is both useful to the specialist and readable by the uninitiated.

The *Natural History* seems to anticipate readers with varying levels of expertise and different styles of reading. In the preface, Pliny sets it up as a text that can and should be used: it is promoted as a collection of useful information that can be redeployed by the diligent reader. Pliny contrasts his addressee, Titus, with the people whom he marks out as natural readers of his work: farmers, craftspeople and idle scholars (*HN* pref. 6). He dryly jokes that he has provided a list of contents for Titus, who is a busy man, thereby allowing his other readers to pinpoint information

[1] Some of the material in this chapter is covered (in rather less detail) in Doody (2010).

without having to read the whole thing (*HN* pref. 33). As I have argued elsewhere, it would have been awkward in practice for Pliny's first readers to answer specific questions by making use of the list of contents that Pliny provides in Book 1: the cumbersome book roll format and the likely absence of numbered divisions or running headings in the text limited its utility as a finding tool.[2] Still, Pliny envisages an ideal reader who comes to the text with a specific question in mind: that reader is either a practical man or a curious scholar, but they are imagined as active readers, capable of using the tools Pliny provides to find the information that they require.

Although in his preface Pliny summons up the image of the expert reader who uses his text piecemeal, his assumption elsewhere is that the reader is reading for enjoyment and following the text sequentially. We see this assumption not just in his plentiful cross-references and the careful hierarchies of his text's structure, but in the way Pliny goes about his project.[3] As Gian Biagio Conte suggested, the *Natural History* finds its sense of unity in a shared sensibility between writer and reader: 'the capacity to be astonished and the will to astonish'.[4] We see this sense of enjoyable astonishment clearly, for instance, in Pliny's exuberant *vade mecum* at the beginning of his account of the strange customs of human beings in Book 7 (*HN* 7.7):

> Naturae uero rerum uis atque maiestas in omnibus momentis fide caret, si quis modo partes eius ac non totam complectatur animo. Ne pauonis ac tigrium pantherarumque maculas et tot animalium picturas commemorem, paruum dictu, sed inmensum aestimatione, tot gentium sermones, tot linguae, tanta loquendi uarietas, ut externus alieno paene non sit hominis uice!

> In every instance the power and majesty of the nature of things is unbelievable if your mind grasps only parts of it, and not the whole thing. I needn't recall the spots on peacocks, tigers, and panthers or the markings of so many other animals, a small thing to mention but a huge thing to think about—or all the different types of speech and language and ways of talking, which make a foreigner seem hardly human to someone of another race!

Here Pliny encourages his readers to be open to the peculiar facts he is about to relate about bizarre types of humans, ranging from cannibals to one-legged peoples, by claiming that the power of nature is only revealed

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2 See Doody (2001), also Small (1997) 16–19.

3 On Pliny's cross-references, see Naas (2002) 197–199; on these and also narrative hierarchies, see Henderson (2011).

4 Conte (1994) 104. Cf. Beagon in this volume.

to those who know about nature in its entirety and, implicitly, only to those readers who follow Pliny through all the byways of his text.

Unfamiliar and technical names pose problems for Pliny in his attempts to cater to both groups of reader: the specialist user he identifies in the preface and the general reader who shares his desire to understand and enjoy nature in its entirety. For the specialist who wants to use Pliny's information, there are difficulties in identifying what is meant by an unfamiliar name, difficulties Pliny himself experiences in his own reading and raises as a concern repeatedly in the *Natural History*. For specialists presented with obscure names of obscure objects, Pliny manifests anxiety as to how they will be able to activate the information presented in the text, alongside a desire to display erudition by presenting information difficult to obtain elsewhere. On the other hand, Pliny repeatedly expresses concerns that general readers faced with a barrage of unfamiliar and exotic terms may become bored and discouraged. This motif first appears in the preface and, as we will see, affects Pliny's choices about what and how many names to include (*HN* pref. 13). I intend to demonstrate the effects upon the text of these competing motivations by focusing on Pliny's choices in his treatment of plant and place names in the *Natural History*: do names have different significance for the reader who browses, as opposed to the reader who consults the *Natural History* for a specific fact? At what level do names remain words in the text rather than things that can be identified in the world outside the encyclopaedia?

Using Names: Identifying Plants in the Natural History

Pliny's *Natural History* had a phenomenonally long history of use as a practical compendium of information.[5] In a medical context in particular, the correct identification of the substances Pliny names was perceived to have serious consequences for the health of a patient. The difficulties of later readers in understanding and deploying the information in the *Natural History* are paralleled by Pliny's own struggles with his sources, and the problems he encounters in trying to identify the substances mentioned in the texts that he draws upon. Pliny's efforts to understand the names in his sources and his choices about how to transmit that information to his readers provide clues to how he expected his readers to use his

[5] On Pliny's reception, see Borst (1995), Chibnall (1975), Doody (2010), Nauert (1979).

text, and the work that they needed to do in order to understand it. The spectre of dangerous mistakes hangs over discourse on the identification of *materia medica* from names in the text: alongside the positive promise that the *Natural History* gives readers the power to heal themselves runs an anxiety that self-medication may have disastrous results if the reader misunderstands the text. It is one of Pliny's own mistakes that I will take as a starting point in exploring the steps that Pliny takes and promotes to ensure the correct identification of names in a text with substances in the world.

The particular mistake I want to explore has the distinction of appearing in the *Oxford Latin Dictionary* under *hedera*, which means 'ivy' except when Pliny is mistakenly using it to refer to rockrose (*Oxford Latin Dictionary* 789):

> **hedera** ~ae, *f.* (**ed**-). [dub.]
> **1** Ivy. **b** (app. wrongly applied to rock-rose by confusion of Gk. κίσθος and κισσός).
> Omnia conuestiuit ~a CIC.*Q.Fr.*3.1.5; ut tenax ~a .. arborem implicat CATUL.61.34; CAES.*Civ.*3.961; errantis ~as VERG.*Ecl.*4.19; HOR.*Carm.*1.25.17; SEN.*Nat.*2.22.1;—(*connected with the cult of Bacchus*) sacerdotes Liberi anus ~a coronatae VAR.*L.*6.14; ~as legit in thyrsos PROP.3.3.35; STAT.*Theb.*12.623; OV.*Fast.*3.767; TAC.*Hist.*5.5; ~ae quoque .. arbores non male dicentur ULP.*Dig.*47.7.3.1;—(*used in a poet's garland*) ~a crescentem ornate poetam VERG.*Ecl.*7.25; HOR.*Carm.*1.1.29; PROP.4.1.62; nunc ~ae sine honore iacent OV.*Ars* 3.411.
> **b** ~ae flore deroso PLIN.*Nat.*12.74; 16.145.

Hedera is the Latin for ivy and *cisthus* is the Latin for rockrose, but at two points in the *Natural History*, Pliny uses the word *hedera* to refer to rockrose. At *HN* 12.74, Pliny is talking about an aromatic gum, ladanum, which is produced by rockrose but not by ivy, but Pliny uses the name *hedera* to refer to the plant it comes from. Again, at *HN* 16.145 in the course of his discussion of types of *hedera*, Pliny produces one sentence that paraphrases a passage in Theophrastus' *Historia Plantarum* on rockrose (*HP* 6.2.1) and then follows it with a section based on a different part of the *Historia Plantarum* that deals with ivy. This error in his reading of Theophrastus leads him to mistakenly state that ivy has rose-like flowers which are purple in the male plant.

As the dictionary indicates, on one level, Pliny's confusion of ivy and rockrose rests on a simple confusion between their similar-sounding Greek names, *kissos*, ivy, and *kisthos*, rockrose. This mistake could have happened in a number of ways. As Jacques André suggested, Pliny or his copyist may have misheard the slave as he read a copy of Theophrastus aloud, or perhaps the mistake had already been made in the copy of

Theophrastus that Pliny owned.[6] Ironically, Pliny was well aware of the potential for confusion between the names *kissos* and *kisthos* and draws the reader's attention to their similarity in Book 24, where he correctly distinguishes between the two plants (*HN* 24.81). When he is not making a mistake, *hedera* is the name Pliny uses to refer to ivy; *cisthus* is the name he uses to refer to rockrose, a basic transliteration of the Greek name. Despite his efforts to distinguish between ivy and rockrose, *kissos* and *kisthos*, this mistake points to weaknesses in Pliny's research methodology, weaknesses that can be attributed either to faulty philology or to lack of practical expertise. On the one hand, if Pliny had paid more attention to the Greek or consulted a larger range of manuscripts of Theophrastus, he might have correctly distinguished whether *kissos* or *kisthos* was meant. On the other hand, if he knew from empirical observation that ivy does not produce aromatic gum, he would not have confused the names or reproduced the error, if it was already present in his text of Theophrastus. Pliny's error is the result of a mistaken understanding of a name in a text, which produces a flaw the *Natural History*, which had consequences for readers who wished to put the information into practice.

It is because of the potential consequences for medical practice that the discovery of this error in the fifteenth century had far reaching effects. Pliny's mistake about ivy / rockrose is a peculiarly important one in the history of scholarship. It was the spark for the famous controversy between the medical scholar, Niccolò Leoniceno, and the philologist, Angelo Poliziano and his protégé Pandolfo Colennuccio, a key moment in the history of Pliny's text, and in the evolution of humanist scholarship.[7] Leoniceno's innovation was to blame Pliny himself rather than intermediary copyists for factual errors in the *Natural History*, and to insist that lack of experience as well as faulty understanding of Greek texts led Pliny into error. The controversy began in an exchange of letters between Poliziano and Leoniceno: by comparing Pliny's text with that of Dioscorides and Theophrastus, Leoniceno had uncovered the confusion of *kissos* and *kisthos* that lay behind Pliny's references to *hedera* in the *Natural History*. Poliziano's defence of Pliny was robust: he argued that Pliny had made no such mistake, and suggested that Leoniceno's

[6] André (1956). On Pliny's botanical errors, see also Stannard (1965), Lloyd (1983) 140–146.

[7] On this controversy, see Davies (1995), Fera (1996), French (1986), Godman (1998) 80–134, Nauert (1979), Ogilvie (2006) 30–34, 126–130.

misunderstanding of the text emerged from a problem of punctuation at *HN* 16.145, duly suggesting an emendation which he believed could solve the problem without the need to look beyond the confines of Pliny's text.

Leoniceno's response was the *De Plinii et aliorum medicorum in medicina erroribus*, published in 1492. In this landmark publication, Leoniceno is impatient with Poliziano's philological approach to Pliny: 'This is not about the movement of words,' he says, 'but about things, on which human life and human health depend'.[8] He called on scholars to be active readers, who should combine careful reading of ancient texts with direct observation of things, and rely in the last analysis on their own judgement. According to Leoniceno, Pliny had made the same sorts of mistakes elsewhere in the *Natural History* as he had made about *hedera*: Pliny's confusion over names leads him to conflate several plants into one or, conversely, to multiply the number of plants by failing to associate alternative names for the same thing.[9] Correct terminology, Leoniceno insisted, was essential to correct understanding of things. For Leoniceno, names in the text must correspond to real things in the world, and the challenge to readers was to use their own knowledge, both textual and experiential, in making use of Pliny's information.

The 'attack on Pliny' that the case of *hedera* launched marked a shift in the prominence given to empirical arguments in critiquing ancient medical texts, although there is some debate as to whether or not Leoniceno himself delivered on his rhetoric.[10] But despite mistakes in the *Natural History*, Pliny did believe in the importance of seeing plants for himself, and was well aware of the problems involved in identifying plants solely on the basis of written descriptions. At the beginning of Book 25, Pliny deals with the issue head on, and offers himself up to his readers as a

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[8] *Nam quum hic non de verborum momentis, sed de rebus agatur, ex quibus hominum salus ac vita dependent* (Premuda (1958) 197). My references are to the 1958 Italian edition of Leoniceno's work.

[9] Leoniceno draws this out explicitly in his discussion of Pliny's mistake about ivy / rockrose: Premuda (1958) 163.

[10] Thorndike (1934) 593–610 and Nauert (1979) emphasise continuity with contemporary philological practices in Leoniceno's dependence on his readings of Theophrastus and Dioscorides rather than direct observation in finding fault with Pliny; Davies (1995) and Ogilvie (2006) see a more definite break with tradition in Leoniceno's turn towards empirical evidence.

model for how they too ought to become active readers, using his text as the starting point in their investigation of plant remedies. Pliny deals first with the question of providing illustrations so that the reader has a visual aid in identifying plants discussed in the text, noting that Crateuas, Dionysus and Metrodorus had adopted this strategy in their works. Pliny decides against it, explaining that it is too dangerous because of scribal error, and the fact that plants look different depending on their maturity and the season of the year (*HN* 25.8).

Pliny goes on to approve of those texts which provide names alone and put their faith in the reader's ability to do the necessary work to find out what is meant by them (*HN* 25.9):

> quare ceteri sermone eas tradidere, aliqui ne effigie quidem indicata et nudis plerumque nominibus defuncti, quoniam satis uidebatur potestates uimque demonstrare quaerere uolentibus. nec est difficilis cognitio: nobis certe, exceptis admodum paucis, contigit reliquas contemplari Antoni Castoris, cui summa auctoritas erat in ea arte nostro aeuo, uisendo hortulo eius in quo plurimas alebat centesimum annum aetatis excedens, nullum corporis malum expertus, ac ne aetate quidem memoria aut uigore concussis.

> This is why others have given descriptions of them: some did not indicate their appearance and most have been satisfied with providing the names alone, since it seemed enough to point out the powers and strengths for those willing to look for them. It is not a difficult knowledge to acquire: I at least have been able to examine all except a very few by visiting the garden of Antonius Castor, the greatest expert of our era in this area of knowledge. He cultivated a large number of specimens there, even when he was over one hundred years old and experienced no physical illness or loss of memory or energy even at that age.

Here Pliny optimistically claims that knowledge of plants is easy to acquire on the basis of the names alone if one is willing to go to the trouble of asking or investigating, and offers his own experience as an example for others to follow. It is interesting that even when Pliny advocates first-hand observation of plants, he does not suggest grubbing around in the dirt of first-hand research. Pliny has used the garden of Antonius Castor to find out what the plants he had read about were: all but a very few were accessible to him simply by asking an expert. For the active reader envisaged here, the text provides a clue in the name, with or without description of the plant, which the reader then unravels. A name on its own can be enough to find the plant in the real world, but this is an easy process only if, like Pliny, you have an expert to ask, and an encyclopaedic garden to consult.

Elsewhere, Pliny is less optimistic, more anxious, about the ease with which a name and a plant can be associated. The implication here that it is only the unwillingness of readers that bars access to the knowledge of plants is undercut a few paragraphs later, when Pliny bemoans the fact that it is only the uneducated peasants who live in close proximity to the plants who can recognise them in the wild. Others, he says, tend to rely on doctors without being in a position to recognise the plants themselves (*HN* 25.16):

> haec erat antiqua medicina, quae tota migrabat in Graeciae linguas. sed quare non plures noscantur, causa est quod eas agrestes litterarumque ignari experiuntur, ut qui soli inter illas uiuant; praeterea securitas quaerendi obuia medicorum turba.
>
> This was a tradition of medicine which was transmitted wholesale in the language of Greece, but the reason why not many are familiar with it is that it is people from the country and uneducated people who have knowledge of plants, since they are the only ones who live among them; besides, the large number of doctors available makes it easy to be careless about finding out about them.

Pliny's frustrations here resonate with wider themes in his text. In the medical sections of the *Natural History*, Pliny's overarching aim is to provide the Roman reader with direct access to knowledge of simples so that they can avoid the necessity of employing Greek doctors. Pliny's traces his stance against Greek medicine back to Cato the Elder, adopting a traditionalist emphasis on self-help that may have appeared rather reactionary in first century Rome.[11] Here, country people with knowledge of plants are implicitly contrasted with urban Romans who prefer to rely on doctors rather than making the effort to acquire that knowledge for themselves.

Both uneducated country-people and experts pose problems as custodians of this knowledge for those, like Pliny, who wish to learn. More worryingly still, given Pliny's earlier faith in identifying plants by their names alone, some plants have no names at all because of scholars' lack of interest (*HN* 25.16):

> multis etiam inuentis desunt nomina, sicut illi quam retulimus in frugum cura scimusque defossam in angulis segetis praestare ne qua ales intret.

[11] See the opening section of Book 29 for Pliny's partisan history of Greek medicine (*HN* 29.1–28), including his quotation of Cato's famous advice to his son on the treachery of Greek doctors (*HN* 29.14).

turpissima causa raritatis quod etiam qui sciunt demonstrare nolunt, tamquam ipsis periturum sit quod tradiderint aliis.

Many that have been discovered have no names, like the one I referred to in treating crops and which we know to bury in the corners of the field to keep birds away. The most shameful reason for the general lack of knowledge is that even those who do have it refuse to share it, as if they would lose it themselves if they gave it to others.

Pliny's own generosity in sharing his amassed knowledge is undermined by the obstacles that beset the reader who wants to make use of it. The text's unadorned information on simple remedies is supposed to be put into action by the reader, but to identify the plants by the names the text provides, readers need to supplement textual information with real world experience, either their own, or that of an expert who can point out the plants.

Although Pliny is optimistic about the ability of the name alone to provide enough information for a reader to identify the plant, he is not unaware of the difficulties involved in negotiating the gap between text and world. In the absence of an Antonius Castor with his collector's garden, Pliny acknowledges that it is difficult for those who are not illiterate peasants to acquire knowledge of plants, and blames the recalcitrant self-interest of doctors for this state of affairs. Some of these difficulties involve the names themselves: Pliny is aware that names can become confused, or that multiple names can be used to refer to the same plant, although, as Leoniceno pointed out, Pliny himself makes mistakes of both types in his work; he is also concerned by the problems posed by plants that have no name, or no Latin name.[12]

The difficulties for readers who want to use the text's information occur at two levels: not only are there problems with the accuracy of the names provided in the text, but even when the names are right, there is a process involved in making the leap from the name in the text to the object in the world, a process which Pliny recognises can be a difficult one. Pliny's confusion of the Greek names *kissos* and *kisthos* leads him to ascribe characteristics of rockrose to ivy, a mistake that betrays his reliance on textual sources rather than direct observation of the plants themselves. Despite his insistence that his text should be used and his information

[12] Plants with multiple names: type of pear *HN* 15.53–54; type of laurel *HN* 15.132; types of oak *HN* 16.17; types of larch *HN* 16.48. Plants with no Latin name: Macedonian trees *HN* 12.25; trees described by Juba *HN* 12.38–40; plants that grow in the sea *HN* 13.135.

put into action, on another level, Pliny's *Natural History* is designed to be read and enjoyed as text. If Pliny's visit to Antonius Castor's garden is held up as an example for the active reader, his evident enjoyment and acceptance of written information provides a counter-example for the reader who reads the text without needing to make use of it. As we will see, for this type of reader names have a different significance; in the *Natural History*, names can function as objects of knowledge in their own right, to be savoured and discussed alongside other interesting features a plant or a place might possess.

Reading Names: Plants and Places in the Natural History

Although Pliny envisions active readers who need to make use of the information in his text, he also caters to readers for whom the information remains at a more theoretical level, readers who, like Pliny himself, enjoy reading books. The erudite general reader of the *Natural History* enjoys the knowing the name, whether or not they are willing to put in the work to activate the knowledge of the object that it represents. Names operate on several levels within the *Natural History*: they constitute information in their own right, and they help to structure the text. Although it is notoriously difficult to generalise about Pliny's organisational principles, in the less discursive books on places, plants and medicines, Pliny often catalogues his information by introducing each new topic with a sentence in which the name is the first or second word. The name in Pliny's ordered catalogues of facts provides the link with the object in the world outside the text, and provides the means by which that object can be included in the world of the text. The named object is the building block of the narrative, where the name in the text is assumed to map directly onto an object in nature. But this equivalency is a matter of some anxiety for Pliny: if an object has more than one name, or a name covers more than one object, this causes difficulties for Pliny's project.

In the *Natural History*, knowing the name of something is an important form of knowledge, sometimes the only knowledge Pliny provides. Names of peoples and places can be simply listed, as if for their own sake, as if commemoration was the sole aim of the text, as happens for instance, the list of fifty three peoples who used to live in Latium at *HN* 3.68–70, or the list of women painters at *HN* 35.147–148. More surprisingly, Pliny sometimes includes names even when he does not know what they refer to, as when he lists the gemstone 'memnonia' (*HN* 37.173), with

the comment 'what it is, isn't reported' or when he preserves the name 'eriophoron' for a type of bulb (*HN* 19.10), but comments that none of the copies of Theophrastus that he has seen contain information on what it is. Pliny's desire to be comprehensive in his totalising account of 'the nature of things, that is life' (*HN* pref. 13) manifests itself in a reluctance to leave things out, even when that information is not obviously useful. Names can represent, for Pliny, a form of knowledge even when they are names for things that no longer exist or are not identifiable.

The name is a significant property of the object, and ordering by similarity of name happens regularly in the *Natural History*, as for instance at *HN* 9.82 when he groups fish whose names resemble land animals or objects, or again at *HN* 37.186 where he groups gems whose names resemble parts of the body. In these cases, it seems likely that Pliny has not seen the obscure fish and gems that the names signify, but Pliny adopts the same strategy in his more mundane round up of different types of pears (*HN* 15.55–56):

> patriae nomina habent serissima omnium Amerina, Picentina, Numantina, Alexandrina, Numidiana, Graeca et in iis Tarentina, Signina, quae alii a colore testacea appellant, sicut onychina, purpurea, ab odore myrapia, laurea, nardina, tempore hordiaria, collo ampullacea; et Coriolana, Bruttia gentilitatis causa, cucurbitina acidula suci.

> Pears which take their name from their place of origin are the Amerian, a very late variety, the Picentine, the Numantine, the Alexandrine, the Numidian, the Greek, including the Tarentine, and the Signine, which other people call the Terracotta because of its colour, like the Onyx variety and the Purple pear. Pears that are named for their scent are the Myrrh, the Laurel, the Nard; the Barley pear is named for its season, the Amphora pear for its neck. The Coriolan and the Bruttian varieties are named after races, the Gourd pear and the Acid pear for their juice.

Here Pliny arranges his available information on pears in a way that will engage his readers' interest, pointing to similarities between their names: it is a strategy that focuses on names as interesting information in their own right rather than simply the means by which types of pears can be identified.

Pliny regularly draws conclusions from names about the things they signify, and focuses in particular on the ability of a name to indicate origins.[13] At the beginning of Book 12, for instance, Pliny notes that all

[13] For further examples of names as clues to origins, see, from Book 15, *HN* 15.70, 15.87, 15.93, 15.119.

trees with Greek and foreign names are not indigenous, and sets out on his description of plants by starting with the most exotic (*HN* 12.14). When he groups pears by their type of name, those whose names have no clear reason become a separate category (*HN* 15.56):

> incerta nomina causa est barbaricis, Veneriis quae colorata dicunt, regiis quae minimo pediculo sessilia, patriciis, Voconiis, uiridibus oblongisque. praeterea dixit uolema Vergilius a Catone sumpta, qui et sementiua et mustea nominat.
>
> Pears that have no clear reason for their names are the Barbarian pear, the Venus pear that is called the Coloured pear, the Royal pear which is called the Short pear because of its very small stalk, the Patrician pear, the Voconian pear, which is green and oblong. Besides these, Virgil mentions a warden pear, which he takes from Cato, who also mentions a Sowing pear and a Must pear.

Pliny's desire to provide complete information surfaces here again, and his reference to Cato and Virgil reminds the reader of the contrast he has drawn elsewhere between the comprehensive lists of names he provides and the relatively small number Cato and Virgil offer.[14] But the expectation here that names mean something, and that they should on some level make sense to Pliny and his reader, has implications for the choices Pliny makes as to what to include and exclude in his text. If something has an obscure or foreign name, this poses problems for Pliny in his literary ambitions for his text. We see this most clearly on those occasions when Pliny explicitly chooses to exclude names which he considers of no interest to his Roman reader.

One of the problems Pliny has with names and specialist terminology in the *Natural History* is that they are often foreign, originating in Greek or, worse, one of the barbarian languages unfamiliar to his Latin speaking audience. In the preface, Pliny flags this as a difficulty, telling his addressee that his work will require the use of 'regional or foreign terms, even barbaric ones, which need an apology in advance' (*HN* pref. 13).[15] The need to use non-latinate names troubles Pliny for patriotic reasons similar to those that lead him to list his sources in Book 1 under

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[14] Pliny criticises Virgil for only naming 15 types of grape, 3 olives and pears, and only the Assyrian apple in the *Georgics* (*HN* 14.7); he draws an implicit contrast between the 15 types of vine that Cato names and his own, fuller treatment at *HN* 14.44, though Pliny is generally approving of Cato, here as elsewhere in the *Natural History*.

[15] *rerum natura, hoc est uita, narratur, et haec sordidissima sui parte, plurimarum rerum aut rusticis uocabulis aut externis, immo barbaris etiam, cum honoris praefatione ponendis* (*HN* pref. 13). For Pliny's attitude to 'barbarism', see Fear in this volume.

the headings of 'Roman' and 'Other', where Roman sources, though there are fewer of them, come before foreign ones, which are overwhelmingly Greek. In his praise of Italy in Book 3, the Latin language is mobilised as a key element in the spread of Roman dominance, which Pliny says has been achieved *lingua manuque*, by our language and our arms (*HN* 3.42). Despite its empire, Roman dominance of the world of scholarship is less assured, and Latin takes second place to Greek as the language of scholarship. Despite his obvious patriotism, at several points in the *Natural History*, Pliny laments Roman lack of ambition in intellectual matters, although Greek specious reasoning and wilful abstruseness come in for criticism elsewhere.[16] Yet, as Guy Serbat has argued, it would be a mistake to find a simple anti-Greek stance in Pliny's work: Pliny has a great deal of respect for Greek learning and Greek literature and a great part of his glee in criticising Greek errors stems from the fact that he relies so heavily on Greek material.[17]

In the case of Greek names, Pliny has to contend with the fact that many of his source texts are Greek, and expects a certain familiarity with Greek among his readers. When Pliny points out the similarity between the Greek names for ivy and for rockrose, he expects his readers to know that *kissos* is the Greek for ivy without being told.[18] Although overzealous Greek naming, where too many names are created that do not exactly correspond to the object, is sharply criticised, Pliny regularly uses Greek terminology, either on its own or as an alternative to the Roman name.[19] When multiple names exist, it can be difficult to distinguish different plants properly by names alone, as Pliny points out in his treatment of acorns, where he turns instead to a description of the plants' nature and properties, and grudgingly resolves to use Greek names

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16 For critiques of Rome's lack of scholarly achievement, see, especially, *HN* 14.1–7 on the expansion of the empire as a missed opportunity for the expansion of knowledge; *HN* 25.1–2 for a contrast between ancient industry and generosity in the pursuit of herbal knowledge and present-day decline. Greeks and Greek scholarship are mocked, for instance, at *HN* 4.1, 8.82, 12.85, 15.19, 37.131–141.

17 Serbat (1987).

18 Pliny begins his account of rockrose in Book 24 by saying, *Graeci uicino uocabulo cisthon appellant fruticem maiorem thymo, foliis ocimi. duo eius genera: flos masculo rosaceus, feminae albus*, 'The Greeks use a very similar name, cisthos, for a shrub larger than thyme and with leaves like those of ocimum. There are two kinds: the flower of the male plant is rose-coloured, the female's is white' (*HN* 24.81). He has just been talking about *hedera*, ivy, but the Greek word, *kissos* has not been mentioned.

19 Although Greek terminology is apologised for at *HN* 2.63, Greek terms are given as direct alternatives for Latin names at, for instance, *HN* 24.89–90, 27.40. See *HN* pref. 24–25, *HN* 37.195.

where absolutely necessary.[20] Pliny does suggest that Roman judgement should be the standard by which such disputes should be settled in his treatment of pine trees, where he comments, *nam in Macedonia et Arcadia circaque Elim permutant nomina, nec constat auctoribus quod cuique generi adtribuant. Nos ista Romano discernimus iudicio*, 'the names are different in Macedonia, Arcadia and around Elis, and the authorities do not agree on what belongs to which species. We decide these things by Roman usage' (*HN* 16.48). But this bravado proves difficult to maintain elsewhere. As Pliny notes in discussing the type of seaweed called by the Greeks *phycos*, sometimes there simply is no Latin name (*HN* 13.135).

Greek names have a scholarly pedigree, and Pliny's use of Greek terminology amounts to a display of erudition as well as being in many cases unavoidable. When it comes to names derived from other foreign languages, Pliny has further reservations. Although foreign, non-Greek names are sometimes provided without comment, or as further evidence of the text's comprehensiveness, Pliny takes issue with them elsewhere on aesthetic as well as political grounds.[21] In Pliny's treatment of palm trees, he decides against listing all their barbarian names, opting instead to organise them by geographical region: *ita fiunt undequinquaginta genera, si quis omnium persequi uelit nomina etiam barbara uinorumque ex iis differentias*, 'there are forty nine types, if anyone wanted to go through all their barbarian names and the different wines you get from them' (*HN* 13.40). This disdain for barbarian names is amplified elsewhere in the geographical sections of the *Natural History*, where Pliny is more explicit about his concerns.

In the geographical books, Pliny relies especially heavily on names alone in mapping the world into his text (*HN* 3.2):

> locorum nuda nomina et quanta dabitur breuitate ponentur, claritate causisque dilatis in suas partes; nunc enim sermo de toto est. quare sic accipi uelim, ut si uidua fama sua nomina, qualia fuere primordio ante ullas res gestas, nuncupentur et sit quaedam in his nomenclatura quidem, sed mundi rerumque naturae.
>
> The bare names of places are set down with as much brevity as possible, their reputation and its causes are related in the proper places; at the moment, however, our concern is with the overall picture. This is the reason why I would like it understood that if the names are invoked bereft of their stories, as they were in the beginning before they had any

[20] *HN* 16.17 *genera distinguere non datur nominibus, quae sunt alia alibi. ... distinguemus ergo proprietate naturaque, et, ubi res coget, etiam Graecis nominibus.*

[21] For examples of names marked as barbarian, see *HN* 10.11, 10.117, 12.97, 18.93.

achievements, and it only amounts to a catalogue of names, still it is a catalogue of the world and the nature of things.

And yet, despite this ambitious claim that he will catalogue the world using lists of bare names, at several points Pliny consciously excludes places from his geography on the grounds that they have unpronounceable barbarian names. At *HN* 3.7, Pliny confines himself to discussing *ex his digna memoratu aut Latio sermone dictu facilia*, 'things that are worth mentioning or easy to discuss in Latin' in his treatment of Baetica; again at *HN* 3.28, he comments *Lucensis conuentus populorum est sedecim, praeter Celticos et Lemauos ignobilium ac barbarae appellationis, sed liberorum capitum ferme CLXVI*, 'the jurisdiction of Lucensis contains 15 peoples, apart from the Celtici and the Lemavi they are unimportant and have outlandish names, but 166,000 free people all together'; on the Liburni, he comments *populorum pauca effatu digna aut facilia nomina*, 'few of these people are worth discussing or easy to name' (*HN* 3.139). In all three passages, a place or people's importance is explicitly equated with its ease of naming in Latin. Whether importance necessitates naming or naming constitutes importance is left unclear, but the difficulty Pliny has in accommodating barbarian names has consequences for the way in which he can write about the world.

Pliny begins his geographical account with the aspiration to include the whole world by simply listing names, and in Books 3 and 4 of the *Natural History*, the books which deal with Europe, Pliny manages more or less to stick to this plan. Once he moves into the further reaches of the empire and beyond in Books 5 and 6, this strategy proves impossible to maintain. At the beginning of his account of Africa, at the start of Book 5, Pliny explains that *populorum eius oppidorumque nomina uel maxime sunt ineffabilia praeterquam ipsorum linguis*, 'the names of its people and towns are completely unpronounceable except in their own languages' (*HN* 5.1). This unpronounceability, which we met already in regard to the barbarian names of Europe, makes African and Asian names unsuitable for listing. This in turn results in a change in the narrative form of Books 5 and 6: the treatment of Africa and Asia is more discursive and more descriptive than the careful catalogue of Europe, particularly in the case of fantastically distant places, as the extended treatment of Sri Lanka exemplifies (*HN* 6.81–91). Pliny is concerned with being understood by his readers, but this principle can come into conflict with his desire for comprehensiveness. At least part of Pliny's problem here is lack of information about far off places, but Pliny assures us that

what is untranslatable is not important, contenting himself with finding a Roman world for a Roman readership.

If the intent of the *Natural History* is to be useful, excluding unfamiliar names represents an exclusion of obscure knowledge that the reader will be unable or unwilling to put to use, perhaps because of the difficulty in understanding what the name refers to. In the case of the excluded barbarian names, on one level, the fact that the plants and places they signify have no proper Roman or Greek name indicates their lack of importance in Pliny's eyes. But the fact that so many names in the *Natural History* are not derived from Latin is problematic for Pliny on political grounds, given his strong pro-Roman bias, in that it provides concrete evidence for a lack of Roman dominance of the world of nature, despite their empire. Pliny is also attempting to cater for his readers' enjoyment: his exclusion of names that are beyond his readers' competence reflects a desire not to bore them.

Given the weight attached to names as a means of identifying objects in the world, as a means of structuring information in the text, and as an important form of knowledge about an object, uncertainty about names and naming poses a serious problem for Pliny's project. He worries that names can become confused, particularly in the case of *materia medica*, and is often punctilious about providing alternative names and distinguishing between them. As we have seen, Pliny is concerned to provide correct names so that his readers can use the text for practical purposes: he warns his readers not confuse the Greek names *kissos* and *kisthos*, and notes the difficulties posed by the fact that some plants have no names, making them difficult to identify. Pliny holds himself up as an example for his readers, assuring them that he has managed to identify almost all of the plants he mentions by visiting the garden of Antonius Castor. Yet Pliny himself makes mistakes, mistakes that indicate that, for him, names often remained words on a page rather than indicating real things that he could identify himself in the world outside his text.

Pliny also provides an example for those readers of his text who are content to enjoy its information and marvel at its detail without necessarily needing to use the information it contains—although part of the pleasure of reading the text is a sense that it could be used, if the need arose. For these readers, Pliny wavers between a desire to display his learning in impressive and comprehensive catalogues of names,[22] and

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[22] For the significance of catalogues of items in the *Natural History* see Naas in this volume.

a fear that he might bore his readers if he includes too many that are incomprehensible. Names are key to Pliny's strategy for inscribing the world in his text: he repeatedly puts his faith in the ability of a name to signify something in the world, often adding little or no description beyond the bare name. Things with multiple names, or no name, or an incomprehensible name pose problems for the neatness of this schema. When it works, however, this approach allows him to be concise as well as comprehensive. The structural importance of names in the text has the added effect of focusing attention on names as interesting features in their own right. Similarity between names appears as a reason for grouping things together, and names are examined for what they can tell us about the things they signify. If there is a science to naming, and a process of investigation implicit in deciphering them, there is also an aesthetic to naming in the *Natural History*. For readers who, like Pliny, are concerned with words as well as things, names can function as invitations to knowledge, sometimes as marvels in their own right.[23]

[23] Cf. Beagon in this volume on the function of marvels and wonders in the *Natural History*.

CHAPTER EIGHT

PLINY ON APION

Cynthia Damon

Introduction

Apion was a first century success story. By birth he was an Egyptian, by training a *grammaticus* in the tradition of Didymus the Great, his teacher, and Theon, whom he succeeded as the head of the Library in Alexandria in about 20 AD.[1] Apion contributed to the Homeric scholarship of his day, producing a *Glossary of Homeric Expressions* and lecturing widely on Homeric topics; indeed according to Seneca Apion toured Greece during Caligula's principate and 'everywhere had Homer's name joined to his.' That is, he was dubbed ὁ Ὁμηρικός 'the Homeric' (Sen. *Ep.* 88.40); this was a man who professed to have conferred with Homer's shade and to possess the true story about the poet's much-disputed place of origin (Plin. *HN* 30.18). Apion won citizenship in Alexandria, one of only two known Egyptians to do so.[2] In or shortly after 38 AD his adopted city chose him to lead an embassy to Caligula in the wake of violent riots between the city's Greek and Jewish residents (Joseph. *AJ* 18.257–259). During the principates of Tiberius and Claudius he also had a school in Rome (*Suda* s.v.; see n. 1). And it was Tiberius himself who bestowed upon him his most memorable sobriquet, *cymbalum mundi* (Plin. *HN* pref. 25).

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[1] Basic biographical information comes from the *Suda* α 3215: Ἀπίων, ὁ Πλειστονίκου, ὁ ἐπικληθεὶς Μόχθος, Αἰγύπτιος, κατὰ δὲ Ἑλικώνιον Κρής, γραμματικὸς, μαθητὴς Ἀπολλωνίου τοῦ Ἀρχιβίου. ἠκηκόει δὲ καὶ Εὐφράνορος γηραιοῦ καὶ ὑπὲρ ρ′ ἔτη γεγονότος, Διδύμου δὲ τοῦ μεγάλου θρεπτός. ἐπαίδευσε δὲ ἐπὶ Τιβερίου Καίσαρος καὶ Κλαυδίου ἐν Ῥώμῃ. ἦν δὲ διάδοχος Θέωνος τοῦ γραμματικοῦ καὶ σύγχρονος Διονυσίου τοῦ Ἁλικαρνασέως. ἔγραψεν ἱστορίαν κατ' ἔθνος καὶ ἄλλα τινά, 'Apion, son of Pleistonices [sic], called "the Drudge." An Egyptian (but according to Heliconius, a Cretan). *Grammaticus*, pupil of Apollonius the son of Archibius. Also studied with Euphranor, then an old man (in fact, more than 100 years old). Raised in the household of Didymus the Great. Taught in Rome under Tiberius Caesar and Claudius. Took over from the *grammaticus* Theon. Contemporary of Dionysius of Halicarnassus. Wrote a history organized by nation and some other works.' For the date of his Library appointment see Cameron (1995) 191 n. 33.

[2] Delia (1991) 56. See also Joseph. *Ap.* 2.71–72 on the rarity of such grants.

Active in the first half of the first century CE, Apion was an older contemporary of Pliny, who reports having seen him in action.[3] Pliny lists him among the external authorities for Books 30–32 and 35–37 of the *Natural History* and mentions him by name seven times in the text.[4] But Apion emerges into special prominence in Pliny's preface, where a reference to his work caps the long list of titles against which Pliny sets (and defends) the title of his own work (*HN* pref. 24–26):[5]

> inscriptionis apud Graecos mira felicitas: κηρίον inscripsere, quod uolebant intellegi fauum, alii κέρας Ἀμαλθείας, quod copiae cornu, ut uel lactis gallinacei sperare possis in uolumine haustum; iam ἴα, Μοῦσαι, πανδέκται, ἐγχειρίδια, λειμών, πίναξ, σχεδίων: inscriptiones, propter quas uadimonium deseri possit; at cum intraueris, di deaeque, quam nihil in medio inuenies! nostri grauiores[6] Antiquitatum, Exemplorum Artiumque, facetissimi Lucubrationum, puto quia Bibaculus erat et uocabatur. paulo minus asserit Varro in satiris suis Sesculixe et Flextabula. apud Graecos desiit nugari Diodorus et Βιβλιοθήκης historiam suam inscripsit. *Apion quidem grammaticus—hic quem Tiberius Caesar cymbalum mundi uocabat, cum propriae famae tympanum potius uideri posset—immortalitate donari a se scripsit ad quos aliqua componebat.* me non paenitet nullum festiuiorem excogitasse titulum …
>
> Among the Greeks there is marvelous inventiveness in titles. They call one work Κηρίον, by which they mean 'Honeycomb,' others [*sc.* have called works] Κέρας Ἀμαλθείας, which means 'Cornucopia' (so that you might even hope to find a drink of hen's milk in the volume), or 'Nosegay,' 'Muses,' 'Hold-All,' 'Handbook,' 'Meadow,' 'Checklist,' or 'Sketch,' titles that you would bet your bottom dollar on. But when you open them up—heavens above!—what a lot of nothing you will find. Our more serious (or duller) Latin authors (*sc.* have titles such as)[7] 'Antiquities,' 'Patterns and Professions'; the witty ones 'Thoughts by Lamplight' (no doubt because Bibaculus 'the bibulous' was as good as his name). More modest are the claims of Varro in his satires 'Ulysses-and-a-half' and 'Folding Tablet.' Among the Greeks Diodorus stopped fooling around and called his history 'Library.' *As for the grammarian Apion—the man Tiberius Caesar used to call the world's gong, though what he really seemed to be was the drum of his*

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[3] There is no reason to call him Apion's pupil, as is often done, on the slim foundation of Pliny's *adulescentibus nobis visus Apion grammaticae artis*, 'the grammarian Apion appeared to me in my youth' (*HN* 30.18).

[4] *HN* 30.18, 30.99, 31.21, 32.19, 35.88, 36.79, 37.75; all discussed below.

[5] For analyses of the preface, see also Schultze, Gibson and especially Morello in this volume.

[6] Thus Mayhoff (1906); the MSS have *grossiores*; *crassiores* is also suggested.

[7] On the genitive form of these book titles see Pascucci (1982) 186.

> *own renown—he wrote that those to whom he dedicated some works received thereby the gift of immortality.* I do not regret not having thought up a more amusing title …

As it stands, the sentence about Apion (in italic font) is grammatically complete but has nothing to do with its context: it is the rhetorical cap of a list of titles and the final item before Pliny explains how he wants his own title interpreted, but it contains no title. The considerations relevant to repairing this sentence are the subject of this paper. Such an investigation is inevitably speculative, but not, I hope, without some light to shed on Pliny and his values.

Apion and Pliny

Apion's work survives in fragments only, but what we know about his reputation in antiquity suggests that his approach to scholarly endeavor has little in common with the model that Pliny proposes in his preface.[8] *Verecundia*, modesty, is an important desideratum for Pliny, particularly in connection with authors' claims about what they have achieved. He commends the artist who signals his consciousness of a work's remaining faults by signing it *faciebat*, 'as if he was intending to correct them,' says Pliny (*HN* pref. 26 *uelut emendaturo*). This is the attitude on display in his own preface, where he expresses modest doubts about both his ability (*HN* pref. 12 *mediocre* [sc. *ingenium*], 18 *homines … sumus*) and his achievement (*HN* pref. 12 *leuioris operae*, 13 *sterili materia*, 13 *rusticis uocabulis aut externis immo barbaris*, 15 *non assecutis*, and 19 *nihil auso promittere*); the sincerity (or lack thereof) of his pose is not at issue here. It is also the spirit that moves him to criticize Livy, who (in Pliny's view) mistook the purpose of writing: an author's goal should be the credit of his subject matter, not his own (*HN* pref. 16 *populi gentium uictoris et Romani nominis gloriae non suae composuisse illa decuit*). Apion, however, was famous for his self-promotion, prompting Pliny to 'correct' Tiberius' *cymbalum mundi*: *cum propriae famae tympanum potius uideri posset*, 'what he really seemed to be was the drum of his own renown' (*HN* pref. 25). Apion's claim to have immortalized his addressees strikes

[8] The principal collections of fragments are Neitzel (1977) for the Homeric glosses and Jacoby (1958: Apion's author number is 616) for the work on Egypt and some miscellanea.

a very different note from Pliny's *etiam non assecutis uoluisse abunde pulchrum atque magnificum*, 'even for those who have not achieved their ends, to have wanted to do so is abundantly fine and glorious' (*HN* pref. 15). Furthermore, where Pliny stresses utility as a criterion of a work's value (e.g. *HN* pref. 16), Apion is an exemplum of frivolous learning for Pliny—at *HN* 30.18 Apion is the last named example in Pliny's tirade against the *uanitas* of purveyors of magic—as well as for Seneca (*Ep.* 88.41 *talia sciat oportet qui multa uult scire*) and Sextus Julius Africanus, who calls Apion περιεργότατος γραμματικῶν, 'the most frivolous of grammarians' (*ap.* Euseb. *Praep. euang.* 10.10.16). Where Pliny demands credit for his willingness to acknowledge his debt to predecessors (*HN* pref. 21 *est enim benignum, ut arbitror, et plenum ingenui pudoris fateri per quos profeceris*), Apion arrogates to himself two stories that had an existence independent of him, the story of Androcles and the lion (Apion insists that he saw the famous encounter in the arena: Gell. *NA* 5.14.4 *ipsum sese in urbe Roma uidisse oculis suis confirmat*), and the story of the dolphin who loved a boy (for which he again claims autopsy: Gell. *NA* 6.8.4 αὐτὸς δ' αὖ εἶδον). Apion's sobriquet Pleistonices captures something of his style: whether the name means 'supreme champion' or 'supremely contentious,' the 'supreme' part reflects Apion's ability to attract attention.[9]

Pliny on Apion

The incompatibility between Pliny and Apion that we can infer from these juxtapositions is evident in Pliny's longest reference to Apion, which comes from his discussion of magic (*HN* 30.18):

> quaerat aliquis, quae sint mentiti ueteres Magi, cum adulescentibus nobis uisus Apion grammaticae artis prodiderit cynocephalian herbam, quae in Aegypto uocaretur osiritis, diuinam et contra omnia ueneficia,[10] sed si tota erueretur, statim eum, qui eruisset, mori, seque euocasse umbras ad percunctandum Homerum, quanam patria quibusque parentibus genitus esset.

[9] Pliny provides our earliest secure reference to the cognomen Πλειστονίκης, or, in Latin, *Plistonicus*: *HN* 37.75 *Apion cognominatus Plistonices*; likewise in Book 1 on the external authorities for Book 36: *Apione Plistonice*. For other attestations of the name and for its meaning see Damon (2008).

[10] On the textual problem in this passage (in *diuinam et contra omnia ueneficia* the word on which the prepositional phrase depends is absent), see Damon (2008).

> A person may well ask what lies the Magi of old told, when the grammarian Apion, a man seen by me in my youth, reported that the plant cynocephalia, which in Egypt is called *osiritis*, has magical properties and is (*sc.* efficacious?) against all poisons, but that if it is pulled up whole the one who pulled it up dies immediately, and further that he had summoned up the dead so he could ask Homer where he was born and who his parents were.

Pliny plainly implies that Apion is a sort of *nouus magus* here: Apion seems to have said that he used the magical plant 'osiritis' to summon Homer from the dead in order to get the much-sought-after story of his birth from his own lips. And Pliny's scorn is evident from the sequel: *non tamen ausus profiteri, quid sibi respondisse diceret*, 'But he didn't dare pass on what he said Homer had replied to him' (ibid.). Elsewhere too Pliny innoculates his readers against Apion's information. At *HN* 30.99, for example, we read of Egyptian reverence for scarab beetles, something for which, says Pliny, Apion offers a *curiosa interpretatio* designed *ad excusandos gentis suae ritus*. And in connection with Apion's testimonial to the skill of the painter Apelles—according to Apion, Apelles' portraits were so accurate that physiognomists could read their subjects' past and future in them as clearly as in the original faces (*HN* 35.88)—Pliny provides the disclaimer *incredibile dictu*.[11]

Even this brief sketch of the kind of evidence that allows Michael Haslam to call Apion an 'academic jet-setter' helps us make sense of the unflattering prominence that Pliny accords Apion in his preface: known to audiences from Rome to Greece to Alexandria, this showman, whose work was at times frivolous and even fraudulent, is an excellent foil to the self-deprecating and altruistic Pliny of the preface.[12] Yet as we saw earlier, the sentence in which Pliny sets up the contrast does not make much sense. More precisely, it does not fit its book title context, which is particularly striking given that the particle *quidem* that Pliny uses to introduce the sentence in question normally insists on the connection between its host sentence and the surrounding discourse.[13]

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[11] Such disclaimers may in fact offer a gauge of the distance between serious ethnographers, who provide θαυμάσιον-indicators such as these themselves, and Apion, whose excerptors supply their own words of caution when using his material. See n. 18 below for one example; also Thomas (1982) 17 and notes 42–44 with the literature there cited.

[12] Haslam (1994) 28 n. 82. For more on Apion's ancient reputation see Damon (2008).

[13] On *quidem* see, recently, Kroon (2005) 589 '*quidem* … indicates that the discourse unit it is used in is a constitutive part of a larger conceptual unit. … *quidem* indicates

The Problem

To get a better sense of the dimensions of the problem, let us look at the argument that Pliny offers to explain his own title. The aspects of *naturalis historia* that Pliny highlights are two: sobriety and modesty. After saying that he says he does not regret not having thought up a more amusing title (*HN* pref. 26 *me non paenitet nullum festiuiorem excogitasse titulum*), he suggests that he wants *Naturalis Historia* to be taken as a 'provisional title' (*HN* pref. 26 *pendente titulo*) for a work-in-progress of whose imperfections its author is aware; hence his praise for artists who signed their creations with a verb in the imperfect tense. Pliny clearly considered titles such as Κηρίον 'Honeycomb' and Κέρας Ἀμαλθείας 'Horn of Plenty' both frivolous and liable to charges of false advertising: ' "Nosegay," "Muses," "Hold-All," "Handbook," "Meadow," "Checklist," or "Sketch," are titles you'd bet your bottom dollar on. But when you open them up—heavens above!—what a lot of nothing you will find!' He goes on sorting titles and their authors according to the same two criteria: Latin authors are sober / dull or witty (*grauiores / crassiores*, *facetissimi*), Varro is somewhat more modest (*paulo minus asserit Varro*), Diodorus refrains from frivolity (*desiit nugari Diodorus*).

The following sentence, our sentence, fits well into this framework insofar as content is concerned: Apion's lack of modesty provokes Pliny to a parenthesis on his noisy showmanship, and the grammarian's promise of immortality aligns him with some of antiquity's grandest genres. But in the absence of the element—a title—that links all of the other works mentioned here, the sentence seems to miss its mark. Thus Giuliano Ranucci in the Einaudi annotated translation of the *Natural History* (Conte, Barchiesi, and Ranucci (1982–1988) ad loc.): 'Non è chiaro il motive della sua citazione a questo punto, se non come un ulteriore esempio di presunzione, non limitata alla scelta di un titolo pretenzioso per la propria opera.' A century and half earlier Charles Alexandre had already noted pretentiousness here, while also putting his finger on the problem of *quidem*: 'particula quidem non uacat sed sententias hoc fere modo connectit: quid mirum si Diodorus emphatica inscriptione usus est, quum Apion, graeculus alter, iis ad quos opera sua componebat non dubitauerit immortalitatem quasi iure suo polliceri.' The *quidem*-

that its host unit forms a conceptual whole with a preceding or following discourse unit; it signals that two discourse units depend strongly on one another for the achievement of what might be called "communicative completeness".

mediated connection that Alexandre describes and Ranucci infers ('un ulteriore esempio'), however, is illusory as the text stands, since Diodorus' title is placed under the rubric of wit (or lack thereof: *desiit nugari*) not that of modesty (or lack thereof). In my view the sentence needs to be emended. In brief, I suggest that its problems would be solved if it contained a title in the place of *aliqua*—so colorless in a context that would seem to require color—specifically, the title of a work in which Apion promised immortality to his addressees.[14]

A Solution?

Every edition of the *Natural History* known to me has *aliqua* in the text, and most recent discussions of Pliny's preface say nothing about the inconcinnity of the passage (e.g. Köves-Zulauf, Howe, Sinclair, Baldwin). Valerie Naas's procedure is representative: she discusses the catalogue of titles up through Diodorus' title, rightly labeled 'le dernier titre cité',[15] then skips to Pliny's remarks on his own title without signaling the presence of a sentence, our sentence, in between. Giovanni Pascucci does say that the sentence doesn't belong here or anywhere else, but he leaves it at that.[16] This laissez-faire attitude, I suspect, arises from the contempt in which Pliny's Latin is held—nothing is too awkward for such a klutz as he, the worst writer of the Latin language in the verdict of Eduard Norden.[17] But a preface addressed to the emperor's son Titus is perhaps a place to demand more of Pliny, to expect his text to make sense. How to proceed?

[14] For a multiplicity of addressees in a single work cf. Seneca the Elder's dedication of his *Controuersiae* to his three sons; for immortality promised to an addressee (rather than a character), cf. both Seneca the Younger's account of Epicurus' message to Idomeneus (*'si gloria' inquit 'tangeris, notiorem te epistulae meae facient quam omnia ista quae colis'*), and his own promise to his own addressee, Lucilius (*habebo apud posteros gratiam, possum mecum duratura nomina educere*, *Ep.* 21.3–5). Of course poets and historians frequently promise immortality, but, as an audience member at Princeton pointed out, such a promise is more surprising in the mouth of a *grammaticus*, to which profession Apion is here firmly tied (*Apion quidem grammaticus*).

[15] Naas (2002) 54.

[16] Pascucci (1982) 186 'A questo punto della lettera subentra, parrebbe, una scheda fuori posto, ma in realtà che non trova alcuna giustificazione, né qui né altrove, chiamando in causa il noto grammatico e libellista antigiudeo Apione, perché nella vacuità dei suoi vanti prometteva immortalità a quanti avesse dedicato uno scritto: l'inserzione dell'*exemplum* risulta pertanto affatto immotivata, non bastando a spiegarla invocare presunte interazioni fra titolo e dedica di un' opera.'

[17] Norden (1909) I: 314–318. Pinkster (2005) offers a welcome corrective to this attitude.

As a first step towards restoring logic to our passage let us consider the remaining evidence for Pliny's engagement with Apion. Apion is cited by name twice in Book 30 and once each in Books 31–32 and 36–37, on topics that include pyramids (*HN* 36.79), a colossal statue of Serapis in the Egyptian labyrinth (*HN* 37.75), a magical medicinal plant that grows in Egypt (*HN* 30.18, quoted above), and Egyptian reverence for scarab beetles (*HN* 30.99). Of Apion's known works, the treatise on Egyptian affairs is the most likely source for these data.[18] In the other passages where Pliny cites Apion, however, there is no obvious connection with Egypt. At *HN* 31.21 Pliny names Apion as his authority for the existence of a pool in Sicily in which nothing sinks. And at *HN* 32.19 Apion provides him with information about an unusual fish, the *porcus* or 'pig-fish' that grunts when captured. While Pliny does not specify this fish's habitat, he does mention its Lacedaemonian name, 'suckling pig.' As we saw earlier, Apion also ascribes phenomenal accuracy to the portraits of Apelles (*HN* 35.88). None of these scraps can be placed securely in any of Apion's known works, but all of them are introduced as *mirabilia*, those wonder-producing features of the natural world that Pliny ushers out of his work in the preface (*HN* pref. 12 *neque admittunt* [sc. *hi libelli*] … *casus mirabiles*) and back in in the indices of Book 1, where there are more than 40 'marvel' sections listed in the tables of contents for Books 2–37.[19]

Apion was one of a multitude of authors from whom Pliny culled *mirabilia*,[20] and his work on Egypt probably offered a particularly rich crop, if Apion, as seems likely, considered himself to be vying with Herodotus, who cites the wealth of the material available to explain the length of *his* Egyptian λόγος: 'About Egypt I shall have a great deal more

[18] Apion's known works include: τὰ Αἰγυπτιακά *Egyptian Affairs*; γλῶσσαι Ὁμηρικαί *Glossary of Homeric Expressions*; περὶ τῆς Ἀπικίου τρυφῆς *Concerning the Luxuriousness of Apicius* (1 fragment); περὶ τῆς Ῥωμαϊκῆς διαλέκτου *Concerning the Latin Language* (1 fragment); περὶ μάγου *On a Mage* (?) (1 fragment); ἱστορία κατ' ἔθνος *History Organized by Nation* (0 fragments; see n. 27 below). The 'titles' *de Alexandri regis laudibus* (Gell. *NA* 7.8.2) and 'On the Apis Bull' (*Etym. Magn.* 26.7) may refer to parts of the work on Egypt. None of Pliny's references to Apion contains a title; the apparent title *de metallica medicina* 'On Metal-based Remedies' in the index for book 35 is a phantom: see Mayhoff (1906) ad loc.

[19] Apion's *fons Phinthia* belongs to the series of *miracula aquarum* listed in the index to Book 31 (cf. *HN* 31.21 *quod si quis fide carere ex his aliqua arbitratur, discat in nullo parte naturae maiora esse miracula*). And his grunting fish story receives like billing: it appears among the *proprietates piscium mirabiles* (index to Book 32, cf. 32.18 *mira* and 32.19 *quod magis miremur*). On the Apelles portrait note *HN* 35.88 *incredibile dictu*.

[20] On *mirabilia* in Pliny, see especially Naas and Beagon in this volume.

to relate because of the number of remarkable things that the country contains, and because of the fact that more monuments that beggar description are to be found there than anywhere else in the world' (Hdt 2.35.1).[21] Gellius' overall impression of the work on Egypt, in fact, is that it was full of material like this: *omnium ferme, quae mirifica in Aegypto uisuntur audiunturque, historia*, 'an account of practically all the marvelous things that are seen and heard in Egypt' (Gell. *NA* 5.14.2). Could it be the title of this work (which Josephus, Gellius, and Tatian refer to as τὰ Αἰγυπτιακά or, in Latin, *Aegyptiaca*)[22] that belongs in place of *aliqua* in Pliny's preface? τὰ Αἰγυπτιακά, especially if written in Greek characters—as are all of the titles of Greek-authored works in the preface, and not a few words in the indices and text of the *Natural History* as well[23]—will have been vulnerable to garbling or omission, leaving *aliqua* as a Latinate residue or a makeshift supplement. One might then emend the passage to read *immortalitate donari a se scripsit ad quos* τὰ Αἰγυπτιακά (or possibly plain Αἰγυπτιακά) *componebat*. But (τὰ) Αἰγυπτιακά—a perfectly standard title—is hardly better than *aliqua* as a cap for the list of objectionable titles, and it suits neither the sobriety nor the modesty rubric that Pliny has established for titles here. The promise of immortality is certainly immodest, but the shift in focus from Apion's title to his dedicatory remarks gives pause. If, however, there were a close relationship between the immortality promised and the title of the work here mentioned the shift would be less jarring.[24] So let us look more closely at what we know about the title of Apion's work on Egypt.

[21] Even in the surviving scraps there are some indications that Apion trod in (and on?) Herodotus' footsteps. The sundial of his Egyptian Moses (Joseph. *Ap.* 2.11) may restate the claim of his country to this invention, which Herodotus said the Greeks learned of from 'Babylonians, not Egyptians' (2.109.3). If Herodotus gets a story about Menelaus' stay in Egypt from priests who had it 'direct from Menelaus himself' (2.118), Apion confers with an Ithacan who knows what game Penelope's suitors played in the courtyard of Odysseus' house (Ath. 1.16e–17b). To parry Herodotus' Ethiopian spring in which nothing floats (Hdt. 3.23), Apion offers a Sicilian spring in which everything floats (Plin. *HN* 31.21). Both authors treated the pyramids, of course (Plin. *HN* 36.79), and both seem to have claimed autopsy of the Egyptian labyrinth (Hdt. 2.148, Plin. *HN* 37.75 where note *etiam nunc*).

[22] Joseph. *Ap.* 2.10 ἐν τῇ τριτῇ τῶν Αἰγυπτιακῶν, Gell. *NA* 5.14.4 *in libro Aegyptiacorum quinto*, 6.8.4 *ex Aegyptiacorum libro quinto*, 10.10.2 *in libris Aegyptiacis*, Tatian *Ad Gr.* 39 ἐν τῇ τεταρτῇ τῶν ἱστοριῶν (πέντε δὲ εἰσιν αὐτῷ γραφαί).

[23] More than 100 words written in Greek are listed in the Concordance (Rosumek and Najock (1996) 6: 5007–5011), several with multiple attestations.

[24] Pascucci (1982) 186 suggests that readers untroubled by the logic of this passage may be comforting themselves with 'presunte interazioni fra titolo e dedica di un'opera'; but he himself is not satisfied that this works.

The title τὰ Αἰγυπτιακά that Josephus, Gellius, and Tatian use in referring to the work is also used by a number of Apion's predecessors in the field and is comparable in form to many of the titles listed in Part 3 of Jacoby's collection of fragments (Ἀχαικά, Αἰτωλικά, Ἀμβρακικά, Ἀργολικά, etc.). The remains of works on Egypt, many of them called τὰ Αἰγυπτιακά, occupy the first half of Jacoby's volume 3C.1. Apion's prominent predecessors in the field included Herodotus, Hecataeus of Abdera, Manetho, and Alexander Polyhistor. A recently written rival was the first book of Diodorus' Βιβλιοθήκη ἱστορική, now the most completely preserved ancient account of early Egyptian history down to the 6th century BCE, along with Egyptian geography and Egyptian culture. (It is also, of course, the opening book of the work mentioned immediately prior to Apion's in Pliny's preface.)[25] Τὰ Αἰγυπτιακά is generally accepted nowadays as the title of Apion's work on Egypt, but there are some slight variations in the ancient forms of reference to the work: Gellius cites it under two titles, *Aegyptiaca* and *libri Aegyptiaci*, and speaks of it, as we have seen, as an account, *historia*, of practically all the marvelous things that are seen or heard in Egypt; Tatian mentions the five books of a single work (αὐτῷ, *Ad Gr.* 39.14–15) and calls them ἱστορίαι. (A similar variation is found in references to a work by Myrsilos of Lesbos, cited by some as Λεσβιακά, and by others as ἱστορικὰ παράδοξα.)[26]

The evidence is admittedly thin, but it does suggest that τὰ Αἰγυπτιακά may be a short-hand form of reference to a work on Egyptian affairs that includes the word ἱστορία in its title.[27] Ἱστορία τῶν Αἰγυπτιακῶν is a possibility, but that title as bland as Αἰγυπτιακά and no more successful at improving the connection between the promise of immortality and

[25] See Burton (1972) 1–34. In the more marvelous portions of his material Diodorus regularly resorts to distancing phrases such as φασὶ … Αἰγύπτιοι (e.g. 1.10.1) or a vague λέγουσι (1.10.4, 1.12.5); a particularly good example is 1.84.1 ἀπίστων δὲ φαινομένων πολλοῖς τῶν εἰρημένων καὶ μύθοις παραπλησίων πολλῷ παραδοξότερα φανήσεται τὰ μετὰ ταῦτα ῥηθησόμενα. Apion had a very well-developed competitive instinct—as we saw earlier, self-promotion is a frequently mentioned aspect of his persona—and this, together with his Egyptian origin, may have helped set the tone of his own work on Egypt.

[26] Ziegler (1949) 1143.

[27] A work with ἱστορία in its title is also singled out for mention in the *Suda* list of Apion's compositions : ἔγραψεν ἱστορίαν κατ' ἔθνος καὶ ἄλλα τινά. The title is a puzzle. The translation 'organized by nation,' which is that of Malcolm Heath in the on-line *Suda*, takes κατά distributively. It ought to refer to a history of various peoples, but the form of the title is without parallel in the *Suda*; a parallel for κατά with the singular is, however, provided by the title τὰ κατὰ πόλιν μύθικα, a work by Acestorides (summarized by Phot. *Bibl.* cod. 189). But if the title ἱστορία κατ' ἔθνος does refer to a history of various nations, it is a work of Apion's about which we hear nothing elsewhere.

the title. However, ἱστορία as a title word very often has a modifier (as indeed in Pliny's own work, *Naturalis Historia*), so let us consider now whether knowing what we do of the nature of the work suggests a modifier for ἱστορία that would accommodate itself to the phrase *immortalitate donari a se scripsit.*[28]

A century after Apion the existence of works that styled themselves 'Histories' but offered a combination of fantastic data and eye-witness reportage provoked Lucian to parody. In a work of his own called '2 Books of True Stories' ἀληθῶν διηγημάτων λόγοι β′—its vulgate title is more simply ἀληθὴς ἱστορία, or, in Latin, *Vera historia*—Lucian claims that in telling a 'true story' about his voyage to the moon and other fantasies he follows the lead of poets and historians and philosophers who had recounted 'many fantastic and fabulous things' (1.2 πολλὰ τεράστια καὶ μυθώδη): 'I write,' he says 'about things I have neither seen nor experienced in any way, nor heard tell of from others, and, moreover, of things that don't in the least exist and are incapable of existing in the first place' (1.4).[29] Photius has a little cluster of descriptions of such works in codices 188–189 of his Βιβλιοθήκη. He read a 'Collection of Marvels', συναγωγὴ θαυμασίων, by the early 1st century AD author Alexander of Myndos, for example, that contained 'many fantastic and incredible things' from the natural world (πολλὰ τερατώδη καὶ ἄπιστα), and a book by a 2nd century AD geographer named Protagoras that he described as 'a history of marvelous tales from around the world' (ἱστορία τῶν παραδοξολογουμένων κατὰ τὴν οἰκουμένην); these are both summarized in codex 188. The marvels reported in these works were vouched for in

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[28] The surviving testimonia and fragments are hard to combine into a coherent picture of the work on Egypt. In addition to the *mirabilia* culled by Pliny (and highlighted by Gellius), there are bits that *seem* like standard historiography. In the 4th book, for instance, Apion seems to have treated the deeds of Amosis, an Egyptian ruler 'contemporaneous' with the legendary Inachus of Argos (see Jacoby's frr. 2a–d). But the treatment can hardly have been chronological, since the period of Amosis' reign—to which Apion dates Moses, and to which Tacitus dates an appearance of the phoenix (*Ann.* 6.28.3)—is also mentioned in Book 3 (fr. 1). Elsewhere Apion uses a pharoah's reign to date one of his *mirabilia* (fr. 13). In addition to the names, deeds, dates, and noteworthy events of historiography (if such these be), the work contained some or all of the sustained attack on the Jews that Josephus rebuts in his *contra Apionem*, likening Apion's work to an indictment (Joseph. *Ap.* 2.4 κατηγορίαν ἡμῶν ἄντικρυς ὡς ἐν δίκῃ γεγραφότα).

[29] One of Lucian's targets in the *Vera historia* is Ctesias, who wrote a *History of Persia* (Περσικά) and a *History of India* (Ἰνδικά) that, as we know from detailed summaries in Photius (codex 72), contained stories fully as fantastic as those of Apion. Pliny includes material from both Ctesias (who describes a lake in which nothing floats) and Apion (with his lake in which nothing sinks) in his chapter on *miracula aquarum* (*HN* 31.21–22).

Alexander's case by citations of earlier authorities, but in Protagoras' case also by eye-witness testimony: 'He brings in,' says Photius, 'many things that he himself has seen, the incredible no less than the rest.' In codex 189 Photius mentions the work 'Marvelous Tales of Rivers, Springs, and Lakes' (παραδοξολογούμενα περὶ ποταμῶν καὶ κρηνῶν καὶ λιμνῶν) of an author contemporary with Apion named Sotion, and the 'Collection of Perverse Customs' (συναγωγὴ ἐθῶν παραδόξων) that the Augustan historian Nicolaus of Damascus dedicated to Herod the Great. Photius has particular praise for a 4-book work of one Acestorides, an author of unknown (but imperial) date, 'Fables from Different Cities' (τὰ κατὰ πόλιν μύθικα), which contained fabulous stories that Acestorides' predecessors had insisted were true but that Acestorides presented as a collection of tall tales: he labeled them μύθοι, according to Photius, and his collection was not so much a history as a 'mythology,' a collection of myths. These works all make some reference to the marvelous nature of their contents in their titles (θαυμάσια, παραδόξα, παραδοξολογούμενα, μύθικα, etc.) but their authors, apart from Acestorides, seem to have insisted upon the truth of their material either by citing a prior authority or by claiming autopsy.[30]

Apion, too, insists on the truth of his material via autopsy and authority, but there is no trace of the fantastic in citations of the title of his work (as opposed to the content, of course). In fact, the one possible piece of evidence we have suggests exactly the opposite. One of Josephus' favorite strategies in his long and wandering rebuttal is to hoist Apion with his own petard, so to speak: he has observed, he says, that it gives people great pleasure ὅταν τις ἀρξάμενος βλασφημεῖν ἕτερον αὐτὸς ἐλέγχηται περὶ τῶν αὐτῷ προσόντων κακῶν, 'when one who has started saying outrageous things about someone else is brought to book for the vices that pertain to him' (*Ap.* 2.5); it is to his practice of quoting Apion's words against him that we owe a great many of the surviving fragments. Apropos of Apion's flaws as a historiographer, Josephus asks, *historiae enim ueram notitiam se proferre grammaticus non promisit?*, 'did the grammarian not promise that he was bringing forth true historical knowledge?' (*Ap.* 2.109).[31] Perhaps the adjective we are looking for lies here:

[30] This tendency is carried to an extreme in the slightly later καινὴ ἱστορία of Ptolemy Chennus, who solemnly cites fictitious authorities for his 'completely irresponsible re-writing of many of the famous stories of the past' (Bowersock (1994) 23–27, quotation from 25).

[31] Josephus' text appears in Latin here because the manuscript tradition for this portion of *Ap.* depends on Cassiodorus' translation. Given Josephus' emphasis on Apion's

vera, or, in Greek, ἀληθής. The full title of Apion's work on Egypt would then be Ἱστορία ἀληθὴς τῶν Αἰγυπτιακῶν, which would be distinctive enough among paradoxography titles to live up to the rhetorical spotlight that Pliny turns on it in his preface.[32] A reference to ἀλήθεια also suits the promise of immortality, since a common ancient etymology derives ἀληθής from α-λανθάνω ('not being forgotten,' *LSJ* s.v.); perhaps Apion spelled out the etymological connection between immortality and truth in his dedicatory remarks.[33]

This title is too cumbersome to fit entire in our passage, but Pliny may have used an abbreviated form of reference for Apion's work, as he does for Diodorus' Βιβλιοθήκη ἱστορική. In shortening Diodorus' title he omits the term most closely connected with the title of his own work, ἱστορική (≈ *historia*); the same procedure, if applied to Apion's presumptive title Ἱστορία ἀληθής, might yield Ἀλήθεια, which would fit neatly into the spot now occupied by the inadequate *aliqua*.[34] The title, written in Greek like all the other Greek titles here in the preface and some of the Greek titles in the indices, will have been exposed to all of the many hazards involved in the copying of Greek words by Greekless scribes.[35] If what Pliny wrote was in fact Ἀλήθεια here, his *quidem* will connect Apion's title 'Truth' to the context of the sobriety/modesty rubrics: 'Truth' is a tall order, as is immortality. We have seen that Pliny

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promise of truth, it is perhaps worth noting places where Josephus calls Apion a liar: *Ap.* 2.14 (καταψευσάμενος), 32 (ψευδόμενος), 56 (*calumniator*), 82 (*incredibili suo mendacio*), 85 (*mentitus est*), 88 (*uerba fallacia*), 111 (*mendacium spontaneum*), 115 (ψευσμάτων), 120 (μυθολογίαν), 122 (καταψευδόμενον).

[32] As we saw earlier, Lucian's parody of paradoxographical 'Histories' also foregrounds truth in its title; he never mentions Apion by name.

[33] On Apion's penchant for etymological play see Neitzel (1977) 190–202 and Damon (2008).

[34] Ἀλήθεια was the title of a work by the sophist Protagoras; like Apion, Protagoras was something of a showman. One may also compare the title Ἀληθὴς λόγος given to a work of polemic by the later writer Celsus, which may have shared features with Apion's 'indictment' of the Jews (see n. 28 above).

[35] I have found no exact parallel in the text of Pliny for the hypothesized corruption ἈΛΗΘΕΙΑ =〉 ALIQUA, more precisely, for Θ =〉 Q (the vowel shifts can be paralleled). The 100+ Greek words in the text (see n. 23 above) are of course frequently garbled and sometimes omitted: aspirated consonants are often transmitted as stops, and the vowels E, I, EI, and H are often rendered with simple E or I, but the closest parallel I can find for the Θ =〉 Q shift is at 24.96 STRUTHION (printed in Latin letters despite the phrase *a Graecis uocari*, which usually signals Greek letters), which appears in one manuscript as STHRUCION (Θ =〉 C). Further research into the vagaries of the transmission of Greek words in Latin texts might yield better parallels, but for now I console myself that to a non-expert, at least, the idea that Θ might be miswritten as Q seems plausible.

balks at Apion's information elsewhere, and he hastens here to point out the self-serving nature of Apion's noise (*propriae famae tympanum*). The passage will then run:

> As for the grammarian Apion—the man Tiberius Caesar used to call the world's gong, though what he really seemed to be was the drum of his own renown—he wrote that those to whom he dedicated 'Truth' received thereby the gift of immortality. I do not regret not having thought up a more amusing title ...

The suggestion that Apion's title contained a reference to truth receives a modicum of support from a piece of information that was explained long ago but promptly forgotten.[36] A Byzantine grammarian named Heliconius stated that Apion was not an Egyptian (as Pliny and Josephus report) but a Cretan (*Suda* s.v.). Heliconius' information, it was argued, is an allusion not to the author's place of origin, but to the nature of his writings. Cretans are always liars, says an ancient conundrum, so if Apion titled his collection of marvels a 'True History of Things Egyptian' the label Κρής was a neat and fitting warning to readers in search of true knowledge.

Conclusion

A work like Apion's created a dilemma for the author of the *Natural History*. In his preface Pliny apologizes (ironically, of course) for the fact that his work will have none of the material that other authors use to enliven their tales (*HN* pref. 12, quoted above). His own subject—*rerum natura, hoc est uita*—is on the dry side; *sterilis materia*, he calls it (*HN* pref. 13). And yet a great many of the book subdivisions listed in the table of contents are *miracula* or *mirabilia*: in Book 2 alone one finds *miracula* involving lightning, earthquakes, landslides, oceans, springs, rivers, fire, and water. Clearly *casus mirabiles* found their way in. Apart from their entertainment value—the popularity of paradoxography suggests that marvels were indeed *legentibus blanda* 'enticing to the reader'—they constituted a strong argument in favor of the reverence for nature that Pliny was so eager to inculcate: *mihi contuenti semper suasit rerum natura nihil incredibile existimari de ea*, 'as I look about me I am persuaded that nothing is too strange to be believed of the world of nature' (*HN* 11.6). In

[36] von Gutschmid (1889–1894) 4: 357.

fact, Apion's Egyptian marvels, however much they may have irritated the rationalist in Pliny, would have been highly serviceable to the evangelist in him.[37]

The argument of this paper has necessarily been speculative. The actual title of the work mentioned by Pliny—if a title be wanting in our sentence—is unlikely to be known for certain, unless the sands of Egypt divulge more Apion than they have done so far.[38] But I will be content if I have made readers look more closely at this sentence, confident that better arguments and better suggestions will emerge as the study of Pliny himself gathers momentum.[39] And I will be delighted if we henceforth hold Pliny to a higher standard.[40]

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[37] On Pliny's attitude to *mirabilia* see Beagon (1992) 8–11.

[38] Bremmer (2005) 322 usefully lists papyri containing Apionic scholia on Alcaeus, Simonides, and perhaps other authors.

[39] I gather here other possibilities that have been suggested to me as I have presented the problems of Pliny's sentence to various audiences over the years (see note below). (1) Perhaps one of his works had a double title, so that what lies hidden under *aliqua* is something we know about but by the wrong name (nothing else comes close paleographically). An appealing candidate is 'Aegyptian Affairs, or, Elysian Fields,' which adds a nice dollop of immortality and draws upon one of Apion's Egyptocentric etymologies (Eust. *Od.* 4.563: 'Elysian' from ἰλὺς Νείλου 'mud of the Nile'; to David Kovacs goes the credit). (2) Perhaps *Aliqua* 'Stuff' was the title, short for 'Stuff about Egypt,' a mock-modest title that would make the promise of immortality the more remarkable (credit to a number of Penn students for this one, together with the suggestion that there is a connection between *aliqua* and the *Suda*'s ἄλλα τινά). (3) Perhaps the title was *Immortalitate donari* or some variation thereon, perhaps in Greek (credit to Penn's Emlen Smith). (4) Perhaps Apion used the names of his addressees in his titles, as philosophers sometimes did (credit to Greg Hays). (5) Perhaps the clue lies in the antithesis between Apion's *immortalis* and Pliny's *naturalis* (credit to Kathryn Morgan).

[40] For their willingness to engage at length with a single sentence from Pliny's mammoth work and for many suggestions about how logic might be restored to it, I am grateful to audiences at Princeton University, Smith College, the University of Colorado, and the University of Pennsylvania, and in particular to those who read draft(s) of the argument I present here: Edward Courtney, Peter Marshall, Sara Myers, Sarolta Takács, R.J. Tarrant. I must also add thanks to the many folks who gathered for the conference in Manchester, who are stimulating study of Pliny on a wide front, which will, I hope, make my effort on this very narrow front seem more worthwhile. Special thanks are of course due to the conference organizers and editors of the present volume, Roy Gibson and Ruth Morello, without whose initiative I would still be tinkering, instead of enlisting the aid of this volume's readers for restoring sense to Pliny.

CHAPTER NINE

PLINY AND THE ENCYCLOPAEDIC ADDRESSEE

Ruth Morello

The epistolary Preface to Pliny's *Natural History* is a complex hybrid in which Pliny lightheartedly introduces his earnest compilation of such interesting facts as he has rescued from the obscurity of rare or specialist works; it offers both defence of Pliny's previous works (especially the *Dubius Sermo*) and explanation of the new work's function as a 'votive offering' to his addressee. It is the proem for the *HN* as a whole, and an honorific address to its imperial dedicatee (*HN* pref. 1), but it is also a cover letter more specifically for the table of contents which fills Book 1 (*HN* pref. 33).[1]

To open a scientific work with an epistolary preface had good precedents; such a practice seems to have become standard in Hellenistic scientific writings from Archimedes onwards, and epistolary writing itself had an important traditional function in the very dissemination of scientific knowledge, much of which was transmitted by letter.[2] There had been recent precedent for the combination of prefatory epistle with table of contents, too, in the much shorter work of Scribonius Largus on medicinal *Compounds*, and in the last sentence of his preface Pliny himself points to the work of Valerius Soranus as a model. Such introductory material can function as a kind of 'user's manual', providing background information, suggesting reading methods, defending a writer's controversial approach, and shaping in advance the reader's attitude to the work.[3] The dense prose of Pliny's prefatory epistle, however, describes and defines both his work and its addressee in unexpected ways, and the writer adopts—even parades—a frivolity of tone which seems on the face of it ill-suited to either.

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[1] On tables of contents in ancient compendia and 'reference' works see Riggsby (2007).

[2] Langslow (2007). On the development of epistolary prefaces in the Hellenistic period, see Janson (1964) 19–21. On the increasing use of such prefaces in multiple genres under the Flavians, see Janson (1964) 106–112.

[3] On Scribonius Largus, see Riggsby (2007) 92–93. For cover letters as *praefationes*, cf. Pliny, *Ep*. 4.14.8 (a letter, incidentally, which deals in part with the role played by letters in defence of *nugae*).

Like all good ancient proems, Pliny's Preface announces in its first words the nature and title of the work: *libros naturalis historiae* (1):

> Libros Naturalis Historiae, nouicium Camenis Quiritium tuorum opus, natos apud me proxima fetura licentiore epistula narrare constitui tibi, iucundissime Imperator; sit enim haec tui praefatio, uerissima, dum maximi consenescit in patre. namque tu solebas nugas esse aliquid meas putare, ut obiter emolliam Catullum conterraneum meum (agnoscis et hoc castrense uerbum): ille enim, ut scis, permutatis prioribus syllabis duriusculum se fecit quam uolebat existimari a Veraniolis suis et Fabullis.
>
> Most Delightful Commander (let this opening address, a supremely truthful one, be yours, while that of 'Most Eminent' grows to old age with your father)—I have decided to tell you, in a somewhat unrestrained letter, about the young born in the latest brood at my place, my books of Natural History (a novel work for the Italian Muses of your Roman citizens)—'for my trifling efforts you always thought were worth something'—to give a passing touch of softness to my 'oppo' (you recognize even this army term) Catullus (for he, as you know, by interchanging the first syllables made himself a little harsher than he wanted to be considered by his 'darling Veraniuses and Fabulluses').[4]

Readers expected the opening words of ancient works to convey genre and subject matter clearly,[5] and Pliny's opening words are blunt and apparently unassuming (indeed he will defend the plainness of his title at *HN* pref. 24–26), but they are also particularly apt: given that the *HN* claims to salvage interesting material from 2000 other works which few readers consult any more (*HN* pref. 17), it is a book *about* books (*libros*) as much as it is a set *of* books of *Natural History*.[6]

Thereafter, however, much of the preface seems an exercise in playful misdirection and occasionally even wanton mis-description of the work it accompanies, as Pliny plays with generic expectations from the outset, building in numerous surprises in his selection and application of vocabulary, images and allusions. Even the noun *praefatio* is first used to denote not the dedicatory letter but rather the honorific opening epithet (*iucundissime*) for the dedicatee—the work itself, important though it is,

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[4] Translations of Pliny's text are taken or adapted from Rackham's Loeb edition. For discussion of this opening passage, and its relationship with its Catullan model, see also Gibson in this volume.

[5] Earl (1972) 843.

[6] Cf. Sinclair (2003) 279, 284. The accompanying Book 1, in particular, of course, will look like a summary 'narrative' of all the other books. On *narrare*, see Naas in this volume.

here takes second place to the addressee.[7] The term *nugae*, too, hardly seems appropriate to any of the works ascribed to this sober curator of knowledge.[8] Pliny's claims for the tone he has adopted for his letter are also puzzling: he labels it *licentior*, and later, in *HN* pref. 2, refers to his own *petulantia* and to an earlier *procax epistula*,[9] but how exactly these qualities manifest themselves in this preface seems no less mysterious than his startling invocation of Catullus as a prefatory model and his equally surprising attempt to surpass that unexpected poetic predecessor in *mollitia*. His descriptions of the contents and subject matter of the *HN* itself, too, seem not to fit the work. As Goodyear says in the *Cambridge History of Classical Literature*, 'digressions, historical references, and elaborate descriptions vary and enliven the work',[10] but Pliny's preface modestly denies that his chosen genre has any room for such fruits of an inventive and playful intellect (*neque admittunt excessus aut orationes, sermonesue aut casus mirabiles uel euentus uarios*, 'nor do they allow of digressions, nor of speeches or dialogues, nor marvellous accidents or unusual occurrences', *HN* pref. 12). Most famous is Pliny's claim that his material (life itself) is *sterilis*. Readers struggle to interpret the irony here. Clearly Pliny is building upon his repeated application of images of fecundity to literary production in the preface, but the implications of what he is doing are hard to tease out, and given (for example) Lucretius' famous opening invocation to *alma Venus*, it is difficult to be fully convinced by readings which see Pliny's approach here as an acknowledgement that 'the nature of things' is not naturally productive of high literature. In short, whether or not they are convinced by Pliny's claims that his works are *nugae*, readers are left with an uneasy feeling that this prefatory letter is generically rather slippery and its irony rather puzzling.

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7 On the connotations of the term *praefatio* here, see the discussion of Köves-Zulauf (1973) 158–166.

8 On the Elder Pliny's publications, see Pliny, *Ep*. 3.5. For extended discussion of the younger Pliny's catalogue of his uncle's works, see Gibson in this volume.

9 For these terms as Pliny's 'own set of ironic conventions' see Howe (1985) 568. For the playful irony of Pliny's characterisation of his works as *nugae* and of his subject matter as *sterilis*, see also König (2007) 197, who also points out that Pliny sets up the *HN* as a 'lighter' work in ironic acknowledgement that it will seem unappealing to Roman readers. For a different view of Pliny's version of Catullus 1. 3–4, see Howe (1985) 567–569 (especially 569: 'he is … not the sort of writer who enriches a pre-existing irony … with his own ironic reading. Instead, he cancels out Catullus' irony so that only the literal sense remains, and thus establishes his own hierarchy of literary values.'). On Pliny and Catullus, cf. Gibson in this volume.

10 Goodyear (1982) 670.

Above all, the treatment of the addressee in the preface's opening sections (particularly the long first sentence) seems to demand interpretation. The very selection of Titus as dedicatee troubled Janson, who struggled to reconcile the preface's many quirky qualities with what is known of its addressee, writing, perhaps unfairly, that 'there is no natural contact at all between the author or his work and the distinguished recipient. The dedication theme then loses its original meaning and the preface is filled with fictions, sometimes actual absurdities.'[11]

This is an extreme position, and few of Pliny's scholarly readers have shared Janson's discomfort. Titus' position as co-ruler of the empire puts him in a special relationship with the writer / administrator who amasses expert knowledge of its resources, and in consequence, as Murphy has argued, Pliny's work needs to perform a delicate negotiation with 'the imperial myth of the Caesars as arbiters of knowledge.'[12] Beagon, too, sees Titus, as master of the empire which provides both framework and subject matter for Pliny's encyclopaedic books, as a well-chosen 'representative of totality'.[13] What we know of his natural gifts and his intellectual interests also suggests that he might indeed have been a suitable addressee for a work like the *HN*. Not only did he possess an extraordinarily retentive memory (Suet. *Titus* 3), but he was himself a traveller and a seeker-out of antiquities and curiosities, as Tacitus' later (rather Plinian) account of a visit by Titus to the temple of Venus at Paphos attests (*Hist.* 2.2–4):[14]

> illum cupido incessit adeundi visendique templum Paphiae Veneris, inclitum per indigenas advenasque. haud fuerit longum initia religionis, templi ritum, formam deae (neque enim alibi sic habetur) paucis disserere .... Titus spectata opulentia donisque regum quaeque alia laetum antiquitatibus Graecorum genus incertae vetustati adfingit, de navigatione primum consuluit.
>
> He could not resist the temptation to go and visit the Temple of Venus at Paphos, which is famous among natives and visitors alike. It may perhaps be of some interest to say a few words about the origin of this cult, the temple ritual, and—since this is quite unique—the form in which

[11] Janson (1964) 103.

[12] Murphy (2004) 204. Cf. Howe (1985) 572–573: 'a work of natural history was, according to Pliny's scheme of things, a singularly appropriate work to offer to a future emperor .... Pliny was not simply treating of the natural world, he was also evoking the place and role of the emperor who was to rule over that world.'

[13] Beagon (2005) 23.

[14] See Murphy (2003) 305 on this visit and on the tradition of aristocratic tourism in the East. On the image of knowledge as property, see Lao in this volume.

> the goddess is represented … Titus examined the rich treasures, which included gifts from kings and other objects for which the antiquarianism of the Greeks claims an origin lost in the mists of the past.

Such a man might well be expected to take an interest in a work Pliny describes in metaphor as, variously, a 'treasure house' (*thesaurus*, *HN* pref. 17) or a collection of votive objects one might find in temples (*templis dicata*, *HN* pref. 19).

None of this, however, fully illuminates Pliny's 'Catullan' approach to his dedicatee in his Preface; by means of allusions to this poet, and the series of rather unexpected jokes which follow, Pliny initially suggests a very different picture of the addressee and his interests: he shows Titus as a pleasure-loving man, one at home with army talk and poetic criticism alike, a gifted speaker of panegyric oratory, as well as a poet in his own right.[15] The youthful Titus was indeed a man of notorious excess and high living, and one who was, as Tacitus puts it, more restrained during his own reign than during his father's;[16] nevertheless, it seems as bold as it is unexpected for Pliny to hint at such qualities in his addressee as part of his preface to this most sober of works. Moreover, Pliny manipulates the same sequence of Catullan allusions and other jokes in order to make some unconvincing claims about the 'trivial' nature of the work he is offering to Titus, and something more unusual than the conventional prefatory modesty seems to be at work in these passages. The present paper seeks to re-consider these features of Pliny's Preface, and it will argue that the humorous paradoxes in Pliny's approach to Titus, together with his apparent modesty about the *HN* itself, should be read as a sophisticated exercise in defining a problematic addressee and then turning him into the reader Pliny wants him to be.

The interpretative difficulties begin, then, with Pliny's decision to open with a playful set of allusions to Catullus, a most unexpected model for the writer of this monumental treasure-house. The Preface's opening sentences call upon allusion to emphasise pleasure and lightheartedness, even 'licentiousness'. Pliny addresses Titus as *iucundissime*, a Catullan epithet in itself, most famously addressed by the poet to his friend and poetic confrère, Licinius Calvus (*iucundissime Calve*, Cat. 14.2). In order to please this Catullan addressee, Pliny tries to outdo Catullus in stylistic *mollitia*, as he 'softens' Catullus' opening dedication, re-ordering a line

[15] For Pliny's jokes, see also Schultze in this volume.

[16] Tac. *Hist.*2.2.

in order to begin with *nugas* instead of *meas*.[17] The assertion that Pliny's *epistula* is *licentior* is unexpected, but this tactically modified Catullan atmosphere is the opening gambit in Pliny's *captatio benevolentiae*. The reference to Catullus conveys not only an understated (if imprecise and slightly misleading) marker of Pliny's northern Italian roots, but also figures the dedicatee as one who shares with Pliny both the mastery of military slang which comes from convivial experience in camp and a connoisseur's knowledge of this poet in particular. That Titus is himself a poet, of course, will be acknowledged later in the preface (*HN* pref. 5), as well as in the body of the *HN* itself (*HN* 2.89). In introducing his 'light' work, then, Pliny addresses a critical reading of a Catullan line to a man of proven poetic skills in his own right, while simultaneously seasoning the Catullan flavours with a rare (and unexpected) military adjective for the poet himself; perhaps by using a word from the rough and tumble of military life, Pliny also implicitly cancels out the effects of his poetic 'softening' of Catullus' line. The term *conterraneus* (clearly labelled here as a *castrense verbum*) thus serves as a 'triangulating' link between emperor, poet and encyclopaedist, emphasising shared military experience, while also marking out the addressee as a philologically-minded kindred spirit.[18] Titus is thereby already subtly being enlisted in the fight to validate Pliny's expertise in unusual Latin—expertise which Pliny will represent as under attack by critics in *HN* pref. 28–29. Pliny is, then, tying Titus' persona and interests very closely to his own experience and to at least one of his past works (though still not convincingly to the *HN*).[19]

If Titus was an alert reader, and remembered his Catullus, he will have understood that Pliny makes a composite reference here to several poems. The line Pliny 'softens' was 'a little harsher' in Catullus 1 for the benefit of a serious addressee, the historian Cornelius Nepos; Catullus would not, Pliny suggests, have composed the sterner version when addressing the friends and dinner-companions, Veranius and Fabullus,

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[17] On one of the interpretative consequences of this change, see Howe (1985) 568, who argues that Pliny's removal of the emphasis on *meas* reflects Pliny's modest emphasis on 'the impersonality of the author'. On *conterraneus*, and on Pliny's 'softening' of Catullus' line, see also Gibson in this volume.

[18] Cf. Howe (1985) 568.

[19] It is tempting to read a similar, if more subtle, linkage between poet, ruler and (shared) literary interests in the account of Titus' poem on the comet of AD 76 (*HN* 2.89): this natural phenomenon belonged, he says, to the category of 'javelin stars', an image which might be especially interesting to a man whose own literary career began with a work *de iaculatione equestri*.

whom he later mentions in poems 12 and 13. Here the imperial dedicatee (himself *iucundissimus*, like those Catullus liked best to dine with) is unexpectedly the addressee of the softer version, designed for the friends of a writer's leisure time. The epithet signals that Pliny has set to work on an agenda which will surprise the reader who doesn't expect any of this from the sober, dutiful equestrian administrator who will later depict himself burning the midnight oil over his researches after a day's work in the service of the emperor (*HN* pref. 18).

One might approach a fuller interpretation of this passage's many difficulties by looking at the preface's pretensions to epistolarity. Despite its oddities, the preface's opening is markedly epistolary in character in that it involves its addressee very closely in a process of informal 'conversational' communication as a regular admirer (*solebas*) of Pliny's work, and as one who has 'commissioned' this letter and perhaps earlier work of other kinds as well.[20] Pliny, indeed, intensifies its epistolary flavour by setting it in a history of epistolary exchange with Titus (2):

> … simul ut hac mea petulantia fiat quod proxime non fieri questus es in alia procaci epistula nostra, ut in quaedam acta exeat sciantque omnes quam ex aequo tecum vivat imperium …

> … at the same time that this impertinence of mine may effect what in the case of another impudent letter of mine lately you complained of as not coming off—that it may result in something getting done, and everyone may know on what an equal footing the empire lives with you …

Titus has shown himself a critic of Pliny before, despite his admiration of his *nugae*—but a critic not of a complete literary work, it seems, but of an earlier letter which is mysteriously characterised as *procax*. That letter is described as having been ineffective in achieving a desired completed outcome (*quaedam acta*); this new letter will, perhaps, go one better in its cheeky style, but, as we shall see, Pliny has his own ideas about what it will achieve.

Pliny's recollection of Titus' criticism serves as a device to highlight more explicitly the differing agendas he ascribes to himself as writer and to Titus as addressee. For Titus, the interplay between epistolary writer and addressee is a means to convey a message about himself to a wider readership, and in so far as he shares Pliny's interest in getting this epistolary tone right, he does so only for the sake of how the new epistle will play to that wider audience as an 'open letter'. He wants

[20] See also Köves-Zulauf (1973) 141–142.

Pliny's letter to 'get something done'. By contrast, Pliny's own emphasis in this preparatory section is on style and tone: he wants to underline his impertinence and frivolity, which he advertises as an attempt to improve upon that unsatisfactory first epistle to Titus and as—unexpectedly—part of his response to the addressee's request for a useful piece of work. Pliny says nothing about the context for that earlier letter;[21] all we are allowed to know is that, despite its rather free tone, it failed to deliver what Titus was hoping for, namely 'that all should know how the empire lived on an equal footing with him'—this, it seems, is what *Titus* would find most useful and what forms the heart of his 'commission' to Pliny.

For this 'correction' of an epistolary failure in past correspondence with the powerful, we might compare *Fam.* 7.5.3, where Cicero acknowledges a similar mistake on his own part in an earlier letter to Caesar, and aims to set it right:

> De quo tibi homine haec spondeo non illo vetere verbo meo, quod cum ad te de Milone scripsissem, iure lusisti, sed more Romano, quo modo homines non inepti loquuntur, probiorem hominem, meliorem virum, pudentiorem esse neminem. (*Fam.* 7.5.3)

> As for him, I will answer that you will find him—I won't use that old-fashioned expression of which you rightly made fun when I wrote to you about Milo. I'll say it in plain Latin, in the language of sensible men: there is no better fellow, no more honest and honourable gentleman alive.
> (transl. Shackleton-Bailey)

In the case of both Cicero and Pliny, the earlier letter is now lost, and 'replaced' by the new one. This is an inevitable feature of letter *collections*, which tend to be full of 'ghosts' of letters lost and echoes of earlier episodes in an epistolary relationship, but for Pliny's work, above all, to announce itself in a *single* letter which alludes to and then replaces its lost forerunner seems especially appropriate, given the degree to which the *HN* consciously summarizes and supersedes earlier works on a whole cosmos of topics (*HN* pref. 17). In Cicero's case, the absurdity of the lost earlier letter's expression is to be rectified with (mock-)solemnity in the new epistle; Pliny's approach is more puzzling, although he too attempts to resolve his difficulties by means of a humorous epistolary style and an

[21] According to Pliny the Younger's bibliography of his uncle's works (*Ep.* 3.5), the work composed before the *HN* was the continuation of Aufidius Bassus' history, but Pliny himself tells us in *HN* pref. 20 that he intends to delay publication of this work. The most recent publication listed in his nephew's famous letter is the grammatical work, the fate of which is certainly preying upon Pliny's mind (*HN* pref. 28–32), but which was composed too early to be connected with the letter referred to here.

emphasis on the playfulness of his exchange of letters with his powerful addressee. So far in the Preface, indeed, references to the preface *as a letter* are all yoked to the theme of a friendly playfulness which almost goes too far—*epistula licentior*, *epistula procax* (and perhaps also *mea petulantia*). The problem with that earlier letter, whatever it was (and whatever *procax* might actually be taken to mean in this context), seems to be partly rectified with the opening play on Catullus in this one. This complex allusion establishes an atmosphere of convivial friendship between writer and addressee, and stages Pliny's own life in a position of friendly equality (*ex aequo*) with Titus.

As Jennifer Ebbeler has argued, however, letter exchange advertises and negotiates social status, and it is the motif of *differences* in status which dominates the opening of Pliny's Preface.[22] Our encyclopaedist sets about 'classifying' his addressee, and tailors the next sections of the preface to suit this project. Even the unexpected opening *praefatio* he uses for Titus (*iucundissime*) is situated in a hierarchy of epithets, somewhere below the more solemn address (*maxime*) appropriate to the older Vespasian.[23] Once Pliny embarks in earnest upon panegyric of his addressee, social status and public distinctions (in the broadest sense) come to the fore, and Pliny begins a meditation upon the appropriate balance between jovial companionability on the one hand and usefulness on the other. In so doing, he suggests that in adopting his air of frivolity he may be misleading his reader for a serious purpose, as he implicitly questions whether the specific 'commission' from Titus is even achievable (2–3):

> ... sciantque omnes quam ex aequo tecum vivat imperium, triumphalis et censorius tu sexiesque consul ac tribuniciae potestatis particeps et, quod his nobilius fecisti, dum illud patri pariter et equestri ordine praestas, praefectus praetorii eius omniaque haec rei publicae es: nobis quidem qualis in castrensi contubernio, nec quicquam in te mutavit fortunae amplitudo, nisi ut prodesse tantundem posses et velles.

> ... and that all may know on what an equal footing the empire lives with you—you with a triumph to your name and censorial rank, six times consul, colleague in tribune's authority, and (a service that you have made

[22] Ebbeler (2007).

[23] Köves-Zulauf (1973) 172. Such a hierarchical distinction, in which terms of political panegyric shade into those of literary criticism, might be considered analogous to that between the verse of Catullus and (e.g.) historiography, or even perhaps epic; if so, Titus is still being placed, however gracefully and wittily, in the 'wrong' category for the serious and useful work which Pliny is offering to him.

> more illustrious than these in rendering it equally to your father and to the equestrian order) commander of his praetorian guard; you are all these things to the republic—and then to us what a good comrade in the companionship of the camp! Nor has greatness of your fortune changed anything in you save in enabling you to bestow all the benefit you desire.

Pliny presents a priamel, in which Titus' achievements (beginning at the top end of the *cursus honorum*) stand as 'foil' to the longstanding relationship between military companions which allows Pliny to fulfil this Caesar's wishes in speaking to him with genial mock-insolence.[24] As elsewhere in this preface, life and language are carefully presented in parallel, as the addressee whose easy familiarity with military vocabulary was advertised in Pliny's opening designation of Catullus as a *conterraneum* is now set in a broader context, and appears not only as soldier and messmate but also as holder of the state's great offices.[25] Pliny's 'classification' of Titus is totalizing, even encyclopaedic, in that the ruler seems to belong everywhere on the political spectrum: not only is Titus *triumphalis* and *censorius*, but he can boast of equestrian service and (as we see later too) of tribunician qualities of *facundia* in his speech. This is as close as we get to an illustration of a way in which the *imperium* might be said to live *ex aequo* with such a man: he belongs in every section of its political class (and his excellence as a ruler lies, perhaps, in this very 'universal' quality). Moreover, the extraordinary career is all the more illustrious in its even-handed service to those of differing status (*patri pariter et equestri ordine praestas*, *HN* pref. 3). This career, Pliny says, still retains a sense of its own beginnings, and of early companionship: all that has changed in Titus is the capacity to be of practical use to those around him.

Nevertheless, the abrupt juxtaposition of *quam ex aequo tecum vivat imperium* with *triumphalis et censorius tu sexiesque consul* is pointed, even jarring (as indeed was *iucundissime imperator* in the first sentence), and I suggest that it is part of his complex *recusatio* that Pliny demonstrates that he cannot with complete success depict a world in which the *imperium* lives *ex aequo* with such a dedicatee. He himself can engage

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[24] On Titus' famous charm and ease of manner in interactions with ordinary soldiers, see Tac. *Hist.* 5.1.

[25] This is not necessarily an unexpected motif for a panegyric; Pliny the Younger will later compliment Trajan on the contrast between his official status as *Imperator* and the *modestia*, *labor* and *uigilantia* with which he acted also as *dux et legatus et miles* when he received the news of his elevation while on campaign (*Pan.* 10.3). The Elder Pliny, however, is creatively building a panegyric motif into his own persuasive agenda.

with him only more or less *ex aequo* on the basis of their shared military background and by dint of a slightly spurious *audacia* ('effrontery', *HN* pref. 4).[26]

Audacia, in fact, is Pliny's only recourse, if he wishes to come close to fulfilling the 'brief' Titus issued in response to his earlier letter. Even that in itself, of course, suggests the difficulty of the task, since in a truly equal relationship *audacia* would not exist, and its manifestation as a *culpa* confirms the distance between writer and addressee,[27] just as an enhanced capacity to be useful and to confer benefits is (as we know from elsewhere) a characteristic function of holding supreme power.[28]

However, Pliny now widens still further the vast gulf between the dedicatee and the general public (i.e. those readers whom Titus wants Pliny to reach on his behalf), by describing their engagement with him in the language of the ruler cult, and contrasting his own more personal approach (4):[29]

> itaque cum ceteris in veneratione tui pateant omnia alia, nobis ad colendum te familiarius audacia sola superest: hanc igitur tibi imputabis et in nostra culpa tibi ignosces. perfricui faciem nec tamen profeci, quoniam alia via occurris ingens et longius etiam summoves ingenii fascibus.

> Consequently as all those methods of paying you reverence are open to everybody else, to me is left only the presumption of honouring you in a more intimate style: and so you will chalk this up to your own account, and will grant yourself pardon on the score of my offence. I have tried to put on a bold face, and yet have not succeeded, as you meet me in grandeur by another route and move me on still further with the rods of office that your genius bears.

Ultimately Pliny acknowledges the failure he predicted for this opening attempt to meet Titus' expectations in epistolary friendliness (*nec tamen profeci*), since one way or another Titus wields both political and

[26] For the panegyric motif of an emperor's inability to raise others to a level on a par with himself despite his best intentions, see Pliny *Pan.* 61.2–4; for his most successful attempts to treat others as equals, see Pliny *Pan.* 60.4, 64.4, 71.3 (and cf. 51.4) for his courteous manner and approachability, see (e.g.) *Pan.* 24.2–3. It is worth noting that many of Pliny's compliments to Trajan are set in the context of Trajan's reluctance to accept a third consulship (*Pan.*56.3).

[27] On *audacia* in political contexts, for example, see Wirszubski (1961). For *audacia* in dealing with the world of a quasi-divine emperor, see (e.g.) Ovid *Met.* 1.170–176.

[28] Ovid *Tr.* 3.4.7 *soli possunt prodesse potentes.*

[29] On Pliny and ruler cult see Scott (1932) 158; the quasi-deification of Titus may also be implicit in Pliny's observation that he has special powers to help his friends, in the light of the assertion at *HN* 2.18 (in predicting Vespasian's deification) that divinity is earned when mortal aids mortal; on this doctrine, see Fear in this volume.

intellectual power. Pliny's metaphor of the *fasces*, contorted though it seems, transfers the language of power (strengthened by a quasi-heroic quality in *occurris ingens*)[30] to the domain of intellectual dominance: Titus can clear Pliny out of his path (*summoves*) with 'the fasces of his intellect', just as lictors clear (*summovere*) the crowd away from the path of a consul (so much for living *ex aequo*).[31] Moreover, it will turn out to be the language of ruler cult which allows Pliny to re-imagine his work as a (humble) votive offering, comparable to the milk and salted porridge offered by a deity's poorer worshippers (*HN* pref. 11 and 19).

A similar metaphorical deployment of the terms of (republican) office-holding to convey intellectual power appears in the next section, as Pliny reminds us once again that *vis* and *potestas* are in Titus' hands in both political and literary terms (5):

> fulgurare in nullo umquam uerius dicta uis eloquentiae, tribunicia potestas facundiae. quanto tu ore patris laudes tonas! quanto fratris famam! quantus in poetica es! o magna fecunditas animi!
>
> In no other person was ever more truly said to flash a force of eloquence and a tribunician authority of wit! How eloquently you thunder forth your father's praises and your brother's fame! How great you are in the poet's art! O mighty fertility of genius!

Titus' stylistic talents, like his career, are expressed in class/political terms and once again pitched as evidence of his position (everywhere) in society, as Pliny maps *vis* and tribunician *potestas* onto *eloquentia* and *facundia*.[32] The terms in which he does so then further enhance Titus' quasi-divine qualities by presenting him as the master of (oratorical) thunder: such is the 'fertility' of Titus' mind, he is capable of Jove-like rhetorical 'thunderings' (*fulgurare*, *tonas*) in panegyric of his father, but also of fine verse. The preface which began by announcing to its 'charming' dedicatee the birth of a new work now returns at the end of its first section to the motif of fertility and literary creation, this time

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[30] Cf. (e.g.) Verg. *Aen.* 11.396, 641. Pliny's metaphors, like the material in the *HN* itself, seem at first sight, to have been stuffed into his preface in profusion, but reflect both the miscellaneous qualities of the work itself and the variety of audiences for which Pliny seems to be writing. The imagery of the whole preface is 'encyclopaedic' in its range of reference, and conjures up an astonishing variety of metaphorical worlds and sense domains. On the complex 'multiple imagery' of the preface, see Beagon (2007) 32.

[31] By contrast, for unobtrusive deployment of imperial lictors as a motif for panegyric, see Pliny *Pan.* 76.8.

[32] The dichotomy between *vis* and *potestas* here is fortified in Rackham's text of this problematic passage: *fulgurat in nullo umquam uerius dictatoria uis eloquentiae, tribunicia potestas facundiae.*

transferred from Pliny himself to the dedicatee. Pliny has positioned his addressee as a totalising polymath, a man of eloquence in his own right, capable of charming, persuading, or praising, a master of panegyric and (at the same time) a lighthearted connoisseur of *nugae* and *mollitia*—the ideal person, in other words, to be the real 'author' of this very preface as it has unfolded thus far (indeed he tells Titus that he has himself, in some sense, provided the material for this letter, *hoc ipsum tu praestas quod ad te scribimus*, *HN* pref. 19).[33]

Pliny has crafted rather subtly the 'fit' between the author, the dedicatee and the prefatory letter, at least, if not the *HN* itself. Nevertheless, he has opened with a teasing approach which implies an element of unsuitability in the addressee, and which suggests that this is a patron who starts out with the wrong approach to commissioning the work and whose tastes and requirements need to be turned skilfully into new channels. Despite all Titus' charm, the skills and qualities Pliny initially highlights in his addressee are not all ones which would seem naturally to make him the ideal *reader* of the *HN*. The compliment paid in *HN* pref. 5 to his poetic expertise, for example (*quantus in poetica es*) suggests—especially when taken in conjunction with the advertisement of Titus' liking for Pliny's *nugae*—that this emperor will not necessarily warm to the work Pliny has offered him. Moreover, the self-centredness of Titus' request that Pliny make sure that every reader understands how the world lives on an equal footing with him seems gradually more pronounced as the Preface begins to demonstrate that his wish is futile; Pliny moves to champion instead a selfless sense of duty and a dedication to utility in written work in preference to pleasure or to personal gain. Pliny's construction of Titus' 'Catullan' persona in *HN* pref. 1 as the 'most charming' dedicatee of the *HN* fits what we know of the addressee, then, and also prepares the ground for Pliny's ironic defence of his own chosen genre as unfit for matters which are *iucunda dictu aut legentibus blanda* (*HN* pref. 12);[34] this is a work which might not appeal to a reader who is himself *iucundus*, unlike, perhaps, those earlier miscellanies (*Violets*, *Muses*, *Hold-alls*, *Handbooks*, *Meadow*, *Tablet*, *Impromptu*) which Pliny lists in *HN* pref. 24, whose seductive titles mask a dearth of real content.

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[33] On Titus as *auctor* see Köves-Zulauf (1973) 166–168.

[34] König (2007) 197. For Pliny's rhetoric here as reflective of his hostility to the cultural prestige of poetic works, see Gibson in this volume.

Pliny's self-positioning in relation to Catullus 1 also implicitly contradicts his description of his own work as *nugae* (*HN* pref. 1) or *levioris operae … libellos* (*HN* pref. 12). Catullus famously contrasted his own work with that of the addressee in terms which emphasised the labour and learning of Nepos' serious history (1.6–7 *cartis / doctis, Iuppiter, et laboriosis*), and an alert reader might well take note of that wider context for the line Pliny modifies. The decision to rework Catullus' line in order to suit lighthearted and convivial friends rather than the serious reader of respectable (and laboriously pursued) historical interests conveys a message not only about Pliny's addressee but about the work itself, which we will discover (*HN* pref. 20) is being offered to the addressee instead of the great history of the Flavians which Titus might prefer. Although one might see the *HN*, as Howe does, as generically 'lighter' than the history which Pliny reserves for posthumous publication, nevertheless one could hardly find a better characterisation for the *HN* itself than 'learned and laborious':[35] in the central section of the Preface, Pliny stresses not only the number of books he has read, but also the degree to which he has devoted every waking hour (in addition to his normal working day as an imperial servant) to the compilation of the work (*HN* pref. 17–19).[36] So in selecting his quotation from Catullus, Pliny has appropriated to his own work characteristics of the writings both of Catullus and of Catullus' addressee. Pliny's contrast between his *HN* and his Flavian history, like his contrast between the charming addressee and the work which struggles to charm, is subtly pitched not only as an example of conventional prefatory modesty, but also as a corrective to Titus' misguided requirements for Pliny's writing.

Further correctives follow. Titus wanted something (here a letter) which would reflect well upon himself and his relationship with the Roman world and which could be called a *completed* work (*quaedam acta*). He is then represented as asking where Pliny's history of the Flavian period is—a work which Pliny openly admits *is* completed (*iam pridem peracta*, *HN* pref. 20), but of which he proposes to delay publication. The *HN*, by contrast, together with all Pliny's other works, is characterised as

[35] On Pliny's work as comparable to that of Nepos, see also Gibson in this volume.

[36] See Howe (1985) 567 for the suggestion that Pliny can plausibly describe his published work (including the *HN*) as *nugae* by contrast with the *historia temporum nostrorum* (*HN* pref. 20). Howe (1985) 562 reads Pliny's 'elaborate self-deprecation and defensive irony' as one manifestation of a thoroughgoing hostility towards poetic and imaginative writing, and argues, in effect, that Pliny treats Catullus as a frivolously poetic straw man in his move towards a defence of his useful prosaic genre.

an *incomplete* project by its very nature (*meis adici posse multa confiteor*, *HN* pref. 28), and in his meditation upon his choice of title for the work, Pliny wants to associate himself with those great artists who emphasised in the style of their 'signatures' that their pieces were only 'works in progress', still some distance from polished perfection (*pendenti titulo inscripsisse, ut* Apelles faciebat *aut* Polyclitus, 'with a provisional title, such as *Worked on by Apelles* or *Polyclitus*', HN pref. 26).

Pliny is concerned not only to flatter and please his addressee at the very beginning of his work, but also to engineer a creative disjunction (one simultaneously flattering and instructive) between the addressee and the encyclopaedia, and much of the body of the *Preface* works to that agenda. In the next section of the preface, for example, he turns from the world of the poet's dinner party or that of the army camp to that of the lawcourts, as he moves from the composite, multi-faceted survey of Titus' political status to the contemplation of Titus in a single role, that of judge on the jury panel before which Pliny (figuratively speaking) defends his encyclopaedia. This continued meditation upon the process and the effects of making dedications in literary work at all is also a means of introducing that wider audience who might be genuinely interested in the *HN*. Had he refrained from dedicating the work to Titus, Pliny says, he could have challenged any imperial decision even to read the *HN* (6):

> sed haec quis possit intrepidus aestimare subiturus ingenii tui iudicium, praesertim lacessitum? Neque enim similis est condicio publicantium et nominatim tibi dicantium. tum possem dicere: 'Quid ista legis, Imperator? humili vulgo scripta sunt, agricolarum, opificum turbae, denique studiorum otiosis. quid te iudicem facis? cum hanc operam condicerem, non eras in hoc albo. maiorem te sciebam, quam ut descensurum huc putarem.'
>
> But who could judge the value of these compositions with confidence when about to submit to the verdict of your talent, especially when that verdict has been invited? For formal dedication of the work to you puts one in a different position from mere publication. In the latter case I could have said: 'Why do you read *that*, Commander? It was written for the common herd, the mob of farmers and of artisans, and after them for those students who have time on their hands: why do *you* put yourself on the jury? You were not on this panel when I took the contract for this undertaking: I knew you to be too great for me to think you likely to descend to this!'

This alternative audience, of course, includes those readers of the *HN* who might have a highly practical interest in Pliny's work: as Pliny began his preface with an announcement of a birth—one described in terms

of animal husbandry rather than human joy[37]—so he continues with images of fecundity transferred to the domain of literary productivity, and suggests that farmers in particular might be an audience he could credibly claim to address.

One might see this as no more than a polite example of epistolary modesty, in the tradition of epistolary *recusationes* addressed to emperors. One of the most commonly cited passages in this tradition is the opening of Horace's *Epistle* to Augustus (*Ep.* 2.1.1–4):

> cum tot sustineas et tanta negotia solus
> res Italas armis tuteris, moribus ornes,
> legibus emendes, in publica commoda peccem,
> si longo sermone morer tua tempora, Caesar.

> Since you bear the weight of so many great endeavours alone, guarding the Italian state with arms, adorning it with morals, and correcting it with laws, I would sin against the public interest if I were to delay your busy hours with long talk, Caesar.

Janson sees this as a model for Pliny's preface only in the loosest sense ('no more than a formal resemblance').[38] At the very end of the preface, however, the reader will find that Pliny has, in fact, offered a novel contribution to that tradition, as he makes creative use of Horace's opening sentiment in the closing sentence of his own address to another emperor. Here he finally gives the 'user's instructions' to his addressee and introduces (as his letter's 'enclosure') the table of contents we know as the first book of the *HN* (33):

> Quia occupationibus tuis publico bono parcendum erat, quid singulis contineretur libris, huic epistulae subiunxi summaque cura, ne legendos eos haberes, operam dedi. tu per hoc et aliis praestabis ne perlegant, sed, ut quisque desiderabit aliquid, id tantum quaerat et sciat quo loco inveniat.

> As it was my duty in the public interest to have consideration for the claims upon your time, I have appended to this letter a table of contents of the several books, and have taken very careful precautions to prevent your having to read them. You by these means will secure for others that they will not need to read right through them either, but only look for the particular point that each of them wants, and will know where to find it.

Taken together with his resistance to the composition of something 'completed' on the topic of Titus' relationship with the *imperium*, Pliny's closing gambit carefully re-defines his work: it is not only 'work in progress'

[37] On *fetura* as a word appropriate to animal reproduction, see Sinclair (2003) 284.
[38] Janson (1964) 101–102.

but a work which readers are not themselves expected to finish.[39] This prefatory letter, along with the table of contents which is formally the accompanying enclosure, fulfils a very specific function: to make sure that the dedicatee of a book never has to read it from cover to cover, as long as he has the letter itself somewhere to hand in case he needs to look something up. Furthermore, Titus is now instructed to make sure no-one else has to read the whole work either, simply by means of keeping (and circulating) this very letter in which Pliny gives an abstract of his work together with the table of contents which outlines the topics included in each book. Just as Pliny mediates and summarises the works of his sources, Titus is to serve as the intermediary agent for Pliny's work by passing on the summary table of contents to the wider reading world.

The Preface began by reflecting on what Pliny could (or could not) offer Titus, and seemed to present or to recall items of work which could be described as *nugae*. As it continues, however, it becomes clear that *nugae* are not what Pliny is producing: the very plainness of his title should indicate this, just as the title of the most sober of the Greek predecessors whom he lists in *HN* pref. 25 also signalled that *nugae* had been abandoned (*apud Graecos desiit nugari Diodorus*); moreover, it emerges that Titus' conception of his own role as patron is to be modified, as he becomes the one called upon to perform a service for Pliny and for Pliny's readership. Pliny wishes that Livy, one of Pliny's monumental models (albeit in another genre), had 'offered' his work for the Roman people's benefit rather than his own (*hoc populo Romano praestitisse*, *HN* pref. 16), and he applies the same verb in several different contexts to Titus: Titus 'offers' (*praestas*, 3) service as *praefectus praetorii* to his father and the equestrian order alike, he 'offers' even the material for Pliny's own work (*hoc ipsum tu praestas*, 19), and finally, he will 'offer' (*praestabis*, 33) Pliny's index to the wider readership whose good opinion he values so greatly, in order to obviate the need for them to study the work in its entirety.

Ultimately the weight and serious utility both of the emperor and the work dedicated to him are only emphasised by the ironic veneer of lighthearted mockery with which Pliny begins his preface. After all, Pliny has told Titus, the principal change in him as he rose from being merely fellow-soldier to imperial ruler and quasi-divinity has been his power to be useful to his friends: *nec quicquam in te mutavit fortunae amplitudo*

[39] This is a move the younger Pliny also makes: in *Ep.* 7.2, he refuses to send Iustus a selection of his *nugae* to read until the winter, when his addressee is likely to be less busy.

nisi ut prodesse tantundem posses ut velles (*HN* pref. 3). The preface's sequence of thought (on the mental journey from Valerius Catullus to Valerius Soranus) brings its addressee to an understanding of the selfless practicality of outlook which Pliny argues is required for anyone involved in literary production, whether as writer or as dedicatee, if he is to be truly useful.

Moreover, the shock of the unexpected Catullan reference at the preface's opening only enhances Pliny's implied claim to a most unusual sort of novelty. Although his works may be *nugae* by comparison with a grand history of his own times, the *HN* in the very plainness of its title claims its place as the Latin equivalent of the *Library* of Diodorus, the one named author among Pliny's Greek predecessors who 'ceased to play frivolous games' (*desiit nugari*, *HN* pref. 25). Unlike the works of other Greek predecessors, which tempt the reader with titles suggestive of pleasurable leisure (*Violets*, *Muses*, *Meadow*, and so on) but then reveal nothing inside (*HN* pref. 24), Pliny's works contain matters of real substance and value and are brought into the world with enough knowledge and competence that repeated attempts at criticism can only miscarry (to use Pliny's own image from *HN* pref. 28). Pliny's apparently exaggerated modesty, in other words, combined with his deft opening alignment of Titus with a pleasure-loving readership and his representation of the addressee's interest in showing how the empire lived 'on an equal footing' with him, is a means of focussing his reader's—and addressee's—attention upon the real literary value of preserving and renewing the work of one's predecessors and making it easily accessible even to the most humble of readers.

Stylistically, however, the decision to open with an incongruous reference to a writer whose persona could hardly be more different from his own makes a powerful statement of a literary ambition to attempt the impossible and to make the lion lie down with the lamb, as it were. Pliny tells us, in a passage which is the culmination of a crucial shift in thought in the main body of the preface, that his challenge is to bring novelty to the antique, authority to the new, glitter to the ordinary and light to the obscure (*HN* pref. 15);[40] that he begins his prosaic work (giving it the plainest possible title) with a play on Catullus which will simultaneously position his work in relation to the more popular 'light' poetic genres and bring his addressee, an intellectually curious and self-promoting charmer, to an understanding of how he can best benefit his subjects as

[40] For the shift of thought in the course of *HN* pref. 12–15, cf. Hutchinson (1993) 41.

Pliny's patron, is, unexpectedly, a statement also of serious literary intent. The opening epistle takes an encyclopaedic approach, both to the predecessors and models (both likely and incongruous) whom Pliny lists, incorporates and eclipses,[41] and to the imperial addressee, whom he figures as the unlikeliest reader of the *HN* and then enlists as a publicist for Pliny's table of contents—that beneficent mechanism which allows readers to avoid reading the encyclopaedia in the first place. Pliny's only real *nugae* are his playful prefatory thoughts, but even in them he means business.

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[41] For the degree to which Pliny 'incorporates' into his own text even the frivolous previous collections with which he seems to contrast his own work, see Schultze in this volume.

CHAPTER TEN

ENCYCLOPAEDIC EXEMPLARITY IN PLINY THE ELDER

Clemence Schultze

Enquire Within Upon Everything: not the Elder Pliny's motto, but the tempting title of a Victorian best-seller. Here, home hints jostle with legal advice; fascinating facts are side by side with handy directions. Information and anecdote, precept and practical instruction cluster in a mass: organisation is not wholly lacking, but the work's charm lies largely in its odd juxtapositions. This one-volume household handbook is recognisably the remote progeny of the encyclopaedic mode, the late-born heir of Pliny's *Naturalis Historia*, his 37-volume enquiry into nature. The appeal of the later, lesser work resembles that of its great predecessor. In both, that which is manifold and complex in character is compelled into order—of a kind—by the art of its compiler; the reader is informed, instructed, and allowed both to wander and to wonder.

Digression, antithesis and swift transitions from one classificatory mode to another characterise Pliny's organisational practice.[1] But as well as this illogical logic of his, familiar modes of argument and illustration are given a new twist. The present paper aims to investigate how Pliny employs one particular literary device, the historical *exemplum*, to direct and to tease his reader. Pliny's exemplarity will prove to have a playful aspect as well as a serious one.

The Praefatio

The very first words of Pliny's work embody dedication, title and authorial assertion (*HN* pref. 1):

> Plinius Secundus Vespasiano Caesari suo, salue. Libros Naturalis Historiae, nouicium Camenis Quiritium tuorum opus natos apud me …

ME TO YOU, TITUS, begins the preface; *THESE*: the books of natural history—in short, *THIS*: a package of five Latin words, the implications of which cannot be unpacked into as few words of English: new, muses,

[1] Vegetti (1981) 111–115, Murphy (2004) 12, 29–48.

Romans, work, born. Claims to novelty, high art, Romanness, effort, and some share in parenthood[2] are compressed in this short summation. And the final words of the work address Nature herself, as Pliny, child and Roman, seeks his parent's favour for his endeavour (*HN* 37.205):

> Salve, parens rerum omnium Natura, teque nobis Quiritium solis celebratam esse numeris omnibus tuis, fave.
>
> Hail, Nature, parent of all things, account yourself celebrated in all your aspects by me, alone of Romans; be favourable.

In between, what? Everything (or nearly everything), for what is there that is *not* nature? Of course, the *praefatio* goes on for a very good deal longer than those first seventeen words cited above: its thirty-three sections are briefly paraphrased here.

With seeming modesty, the *praefatio* begins (1–11) with *YOU*, Titus: your rank, father, family, achievements, talents; also you as soldier, companion, old mate, judge and jury of this work, arbiter, reader—or at least, dedicatee (for the real readers are just ordinary people, farmers and artisans).[3] Throughout this *YOU* section, however, is the constant cry of 'Me, me, *ME*!': companion, old mate, contractor, defendant, author. So: *ME TO YOU*.

Then *THE WORK*: what it's *not*, and (still) *ME*: what *I'm* not: not (very) talented; and the work? well, not very interesting: no digressions, speeches, conversations, remarkable happenings or unusual occurrences (*neque … excessus aut orationes sermonesue aut casus mirabiles uel euentus uarios*, *HN* pref. 12), nothing enjoyable to relate or pleasant to the reader (*HN* pref. 13).

> sterilis materia,[4] rerum natura, hoc est uita, narratur.
>
> Barren stuff, the nature of things, that is, life, is told.

Just *Life, the universe and everything*, in fact. Nothing much. At any rate, it is a *NEW* venture (*HN* pref. 14–15), yet not full of new subject matter; and it is a difficult one. It is useful not pleasurable, the product of leisure and night-watches, not of official working hours—for life is being awake: *uita uigilia est* (*HN* pref. 18). A few figures: 2000 volumes read, 20,000 facts, 100 authors: all this now contained in 36 volumes (*HN* pref. 17). My other works? History? been there, done that; done you

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[2] Ker (2004) 232 translates thus: '"born" in [my] household'. On the preface, see also Damon, Gibson and above all Morello in this volume.

[3] Citroni Marchetti (1991) 15–17, Citroni Marchetti (2005b), 50–51.

[4] Accepting Detlefsen's text here rather than that of the Budé edition.

and your family, in fact, Titus (*HN* pref. 20). This present work: please notice my acknowledgements, my repayment for the cultural capital I have borrowed (*HN* pref. 21–23).[5]

And so (*HN* pref. 24) to titles (*inscriptiones*): *Honeycomb, Horn of Plenty, Violets, Meadows, Tablets*: with such enticements do Greeks lure their readers to—what? there's nothing inside (*nihil in medio*)![6] (*HN* pref. 24):

> nostri graviores Antiquitatum, Exemplorum Artiumque, facetissimi Lucubrationum.
>
> Our more serious Roman authors go for *Antiquities, Instances, Arts*; the wittiest produce *Night Works*.

My unfestive title will suffice; it amounts to no more than 'Pliny was working at this' (*HN* pref. 26–27); my work, I know, could have been fuller;[7] carping complainants there will be—who cares? (*HN* pref. 28–30). Here's the list of contents, so, Titus, *you* don't need to read the volumes; and others can use them as an index (*HN* pref. 33).

Author Pliny thus teases the reader regarding both content and title of his book, in a preface pervaded by irony.[8] The dull workaday title (to paraphrase *HN* pref. 26: *nullum … festiuiorem titulum*) in fact covers everything. Honeycombs there will be, and bees; violets, meadows, tablets and pictures too. The Greeks who had 'nothing inside' their works will find it all in here. As too will Romans: their 'more serious' *Antiquitates, Exempla, Artes*, their *Lucubrationes* are all comprised within the 20,000 facts. For what is life but a wakeful watch? What is the *Naturalis Historia* but a *Night Work*? Pliny has just said so (*HN* pref. 18). And in it *Arts, Antiquities* and *Instances* abound. Here in the *praefatio* Pliny is plainly signalling that there will be jokes as well as facts in his *Natural History*.

Exempla: *Function and Reading*

To claim to handle *everything* necessarily includes a claim to treat man, in both space and in time: man as a being within the natural world and the cosmos; and also man as intellectual and social entity, in relation

5 Murphy (2004) 59–66, 203.

6 Murphy (2004) 33.

7 The project of totality is stressed throughout the work: Carey (2003) 20–26.

8 Howe (1985); see also Murphy (2004) 205–209 on the delicacy of negotiating one's position *vis à vis* the *princeps*. Cf. Morello in this volume.

to the present and the past of humankind. Man as animal is consumer and consumed; man as intellectual being is doer and maker, political being and artist, agent of change, object of regard and memory. But as a *natural* history, the work does not and cannot treat the history of events, or politics as such, or deal comprehensively with biographies. How then to address the human past?

As Pliny reminds his readers in the preface (*HN* pref. 20), he is also the author of a history of his own times.[9] But throughout the *Natural History*, Pliny engages with the wider past of humankind, dealing with cultural history: art, inventions and achievements. He does this in a fashion which manages to combine allusions to the stuff of political history: wars, conquests and triumphs, and the changes and wonders which they bring with them: this is history with *Realien*.[10] As chronicler of man and of nature, he exploits historical *exempla* as one route into this past;[11] other such devices are *documenta* and *monumenta*.

Dozens of the occurrences of the word *exemplum* in the *Natural History* simply mean 'instance', 'case', and amount to the following: 'Such-and-such a phenomenon / thing / plant / animal occurs: here is an *exemplum* of it.' The unadorned singular is frequent, but there are plural usages: *diversis exemplis* (*HN* 18.32), *claris exemplis* (*HN* 25.94); and selections from a plurality: *est in exemplis* (*HN* 2.222), *est inter exempla* (*HN* 7.35). A degree of emphasis or wonder can be added by terms such as *indubitatum* (*HN* 7.51); *ingens* (*HN* 23.58); *unum exemplum mirabile* (*HN* 7.86); *immenso exemplo* (*HN* 22.92); and so on. Others, however, are *exempla* in the sense of 'illustrative case', 'historical instance'. There are also historical anecdotes seemingly exemplary in intent, yet which Pliny does not specifically term *exemplum*; particularly striking is the case of M. Sergius Silus (*HN* 7.104–106).[12] The wide temporal and spatial range of these confirms the scope of Pliny's reading: all places and periods down to his own are plundered for applicable cases to form an historical spectacle analogous to the display of the natural world which he puts before his reader-viewers.[13]

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[9] Cotta Ramosino (2004), Smith (2007), Noè (1984), Wilkes (1972), Münzer (1897), also Ash and Gibson in this volume.

[10] Jal (1987).

[11] Maslakov (1984) 441–442, nn. 7, 8.

[12] Beagon (2005) 50–55 on achievement in general; 293–298 on Silus; 276–280 on Caesar (*HN* 7.91–94, termed *exemplum magnanimitatis* at *HN* 7.93).

[13] Vegetti (1981).

The long Roman tradition of exemplarity was expressed in tales, monuments and art-works, transmitted in histories, applied in speeches and collected in handbooks.[14] Some authors or patrons provided guidance for reading or viewing. Livy, for instance, explicitly directed his readers to find *exempla* in history (*HN* pref. 10).[15] Augustus excerpted from various authors 'precepts and examples' (*praecepta et exempla*) to send to his subordinates for aid or admonition (Suet. *Aug.* 89.2). The dedicatory edict for the Forum Augusti bade the Roman people impose upon him and upon other *principes* in ages to come the demand that they live their lives *uelut ad exemplar* of the great men there commemorated (Suet. *Aug.* 31.5). Ostensibly, then, text and monument offer the Augustan audience (and their leaders) plenty of healthful, fruitful, useful patterns for behaviour. They provide a mode of addressing the past and relating it to the present. Author and audience alike know—at one level—what these things are, and how they are supposed to respond. Whether these *exempla* are quite the straightforward things they seem to be, and how they were received and appropriated, are different issues, object of nuanced studies. But the author's statement of intent provides at least a starting point.

In Pliny's work, however, there is no such programmatic statement to indicate the interpretation of *exempla*: why should there be? For surely simple, laborious Pliny is just giving the reader simple instances, chosen from nature's vast store? But no: the deployment of *exempla* in the *Natural History* scarcely admits of any straight reading. Pliny's procedure with *exempla* resembles the casting of a net into the *piscina* of some grandee. He hauls the *exempla* up, then dashes them back: the right fish, the wrong fish; too humble, too precious—one of the bejewelled *deliciae* of the doting owner. He interrogates them: perhaps they are not so exemplary after all? perhaps they are an *exemplum* of something other than their apparent purport? perhaps at the present we do not require *these particular* exempla? And—like morays in the fish tanks—the *exempla* bite back; they twist and turn, strive and contend; they morph into omens and portents; they are, ultimately, elusive.

A comprehensive treatment of Plinian *exempla* would far exceed the scope of the present paper. Instead, I shall address two *exempla* in detail,

[14] Litchfield (1914), Kornhardt (1936), Lumpe (1966), Berlioz and David (1980) 15–23, Maslakov (1984), Lausberg (1998) 196–203, Stemmler (2000), Haltenhoff (2001) (*non vidi*: cited in Haltenhoff (2000) 24 n. 30), Bücher (2006).

[15] Chaplin (2000).

in order to show how they are ingeniously deployed to augment the encyclopaedia's comprehensive coverage of matter, species and space by relating human beings to the totality of nature within the additional dimension of time. Both are Roman instances: one, short and self contained, concerns C. Furius Chresimus, an obscure farmer who makes a single appearance in the *Natural History*. The other regards L. Licinius Crassus the renowned orator, around whose personality a number of stories clustered, several of which are reported by Pliny. The *exemplum* regarding Crassus as censor constitutes an instance of the opportunity of to-and-fro reading offered by Pliny's text: when reading sequentially, the impact of a later tale is enhanced by knowledge of a preceding one. As Aude Doody has put it:[16]

> Finding specific answers often involves trailing the logic of Pliny's narrative backwards to the books that the text assumes we have read, re-asserting the authority of the narrative's organisation and the entertainment value of the book.

Chresimus and lucubratio *(*HN *18.41–43)*

The story of the *libertus* C. Furius Chresimus, an industrious farmer, is, on the face of it, a straightforward *exemplum*. It carries an obvious moral: hard work brings rewards. The anecdote has generally been accepted as authentic, and considered for what it can reveal about mid-republican Roman society, agriculture and magic; on the whole, little regard has been paid to some of its details and its Plinian context. The present discussion aims to show that this *exemplum antiquitatis* is somewhat more complex than it appears.

Pliny's preface purports to address his work to the ordinary countryman (*HN* pref. 6), and indeed, how to farm well is the topic of Book 18.[17] The book starts with a glowing description of the abundant plants which arise out of the *benigna tellure* (*HN* 18.1), but passes rapidly on to consider nature as the source of poisons (*uenena*)—poisons which are exploited by man. The pessimistic, almost horrific, picture of man as poisoner in turn gives way in 18.5 to a celebration of *naturae maiestas* and the predominance of good over bad. Agriculture is the basis of life, and was held in the highest honour among men of old (*honos apud priscos ma-*

[16] Doody (2001) 20.

[17] Citroni Marchetti (1991) 75–79, Beagon (1992) 161–177.

ximus fuerit).[18] Romulus regulated the two-iugera *heredium* (*HN* 18.6–7; cf. 18.9); both he and Numa established rites and festivals rooted in agricultural practices. The first surnames (*cognomina … prima*) came from crops or equipment (*HN* 18.9–10). Wealth consisted in land or cattle (*HN* 18.11); the Twelve Tables punished crimes against crops (*HN* 18.12); and civic distinctions and offices were based on land ownership, where the rural tribes were held in most esteem (*HN* 18.13). Corn was abundant and food was cheap (*HN* 18.15–18), because the land was tilled not by slaves but by generals who applied to their farming the same *diligentia* as they used in war (*HN* 18.19–21; cf. 18.32–33). The provision of good agricultural advice was accordingly also respected (*HN* 18.22–24); Pliny will draw upon *oracula*—which turn out to be the pithy and time-tested advice of writers such as Cato about choosing and cultivating a farm (*HN* 18.25–40). Some of their precepts have become proverbs (*HN* 18.31); the constant burden is of hard work and personal supervision (though, paradoxically, this may not pay in financial terms: *HN* 18.36–38). 'Making good land from bad' is the aim; and that means to buy nothing that you can produce yourself, and to assign every task to its appropriate time (*HN* 18.40). And so to Chresimus (*HN* 18.41–43):

> I cannot refrain from bringing in one instance from old times (*exemplum antiquitatis*) from which it can be seen that it was the custom to bring before the People even questions of agriculture, and in what way those men were wont to plead in their own defence. C. Furius Chresimus, a freed slave, was very unpopular (*in inuidia erat magna*), because from a fairly small farm he got much larger returns than did the neighbourhood from very extensive properties: he was supposed to be enticing other people's crops away by spells (*ceu fruges alienas perliceret ueneficiis*). Indicted for trial on these grounds before the curule aedile Spurius Albinus, and afraid of condemnation when the tribes should come to cast their votes, he brought all his agricultural equipment into the forum, and his work-force: sturdy, and, as Piso says,[19] well looked after and well-clad; the excellently made iron tools, heavy mattocks, weighty ploughshares and well-fed oxen. Then he said: 'My spells (*ueneficia mea*) are these, fellow citizens; and I cannot show you nor bring into the forum my night labours, my wakeful hours and my sweats (*lucubrationes meas uigiliasque et sudores*).' And so he was acquitted by the votes of all. Assuredly husbandry depends not on expense but on effort (*profecto opera, non inpensa, cultura constat*), and accordingly our forebears said that that the master's eye was the land's best fertiliser.

[18] See also *HN* 14.3, on the *cura* and *industria* which the *prisci* applied to agriculture, and their discoveries, with Beagon (1992) 59, Murphy (2004) 70.

[19] fr. 33 Peter = 43 Forsythe = 36 Chassignet = 36 Beck-Walter.

A nice little story, with many details that suggest olden times: the small farm; the suspicion of magic and spells; the straightforward plea of a hard-working farmer, facing those who are (now) his peers. Chresimus has no string of patrons and advocates to support him, and he is no orator: when he shows his work-force and their tools, a few direct words are enough to explain how he gets his results. It is, in short, a simple tale of country folk. Above all, Pliny seems to be emphasising the antiquity of the episode. The ban on such magical practices went back to the Twelve Tables,[20] which prohibited the use of spells to entice away crops, and also bad charms. Pliny cites the latter provision in his section on charms, cures and magic.[21] The story is redolent of an epoch when a *populus* itself habituated to farming could take the time to hear a charge *de ueneficiis*,[22] and—unaffected by the arguments of those owners of much more extensive (*amplissimis*) estates who were gaining the smaller yields from their crops—could give a fair verdict to the honest toiler.

But perhaps not quite so simple nor quite so old-time, when precision is sought. Pliny has left important clues as to the context of this story. L. Calpurnius Piso Frugi, consul 133 BC and annalist, is named as the authority for the fact of the workpeople's sturdy condition and adequate clothing (*ut ait Piso: HN* 18.42): he must surely have been Pliny's sole source for the anecdote.[23] Several possible Postumii Albini, whose careers range over the first half of the second century, have been proposed as the aedile in question.[24] The episode (if it has any historical reality) would thus have fallen within Piso's own lifetime or that of his father;[25] the

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[20] Crawford (1996) 580–583 (with commentary 677–684): Table VIII.4: *qui fruges excantassit ?quiue? alienam segetem pellexeri⟨t⟩*; cf. Table VIII.1: *qui malum carmen incantassit* … *⟨quiue⟩ occentassit carmen⟨ue⟩ cond⟨isset⟩*. The former charge is probably the one in question here (thus Crawford (1994) 683).

[21] *HN* 28.17–18. Dickie (2001) 142–145 doubts whether the provision in the Twelve Tables was originally directed against magic.

[22] In 331 BC, a *quaestio de ueneficiis* was instituted (Livy 8.18.11, with Oakley (1998) 594–601). The charge covered both the use of spells and charms, and the employment of actual poison: this is probably because the administration of any treatment might also involve appropriate words. Cf. Cato *Agr.* 160 for a healing *cantio*, and Crawford (1996) 678–679 on Cic. *Brut.* 217.

[23] Forsythe (1994) 376–384, Cotta Ramosino (2004) 66–68, 277 n. 106, Berti 1989, Münzer (1897) 63.

[24] Cotta Ramosino (2004) 276 n. 105 cites earlier discussions and agrees with Forsythe (1994) 377–378 as to dating in 191 BC, the presumed aedileship of the consul of 186; Broughton (1951–1952) 1.353.

[25] Forsythe (1994) 380, drawing attention to associations between Calpurnii Pisones and Postumii Albini, suggests that the story reached Piso via oral family tradition.

date would naturally have been clear in a full text of Piso's *Annales*. Pliny, accordingly, could have indicated the dating more precisely, if it mattered—or if he had wished to.

The charge, heard before the tribes, is presented as a criminal one[26] and Chresimus fears condemnation: *metuens damnationem, cum in suffragium tribus oportet ire* (*HN* 18.42). The *inuidia* which Chresimus encounters from his accusers demonstrates how neighbours of higher status resent the success of this low status incomer.[27] The newly-made citizen, moreover, proves more Roman than the Romans in his work ethic: typical of the way in which Pliny questions what it means to be Roman. The Greek name Chresimus should indicate a foreign origin for this freed slave, recalling the influx of slaves into Italy during the second century BC. But the terms *chresimos* and *frugi* are linked by Cicero (*Tusc.* 3.16–17) as possible translations of each other: thus the name Chresimus should share the connotations as the cognomen Frugi, first borne among the Calpurnii Pisones by none other than Piso the annalist.[28] This was supposedly in allusion to his being prepared (on one occasion at least) to stand in line for his share of Gaius Gracchus' corn dole (*Tusc.* 3.48).

Piso's account of Chresimus is the only one which has come down, and will presumably have been the original version.[29] The ethos of the tale seems to fit with Piso's perceived interest in traditional values and morality.[30] Yet the coincidence of the two names must increase the doubt as to the story's authenticity, for it seems as though someone (presumably Piso) was having a little joke. And there is even some irony in the juxtaposition of the industrious freedman farmer and his productive fields with the distinguished consular, known to have been so careful with his money that he was prepared to queue for a corn handout.

The well-made tools and the sturdy work force give the notion that that Chresimus could have read Cato's detailed recommendations for equipping a farm (*Agr.* 10–13). They also signal that he is to be regarded as an investment farmer rather as one eking a bare subsistence from a

[26] Modern opinions diverge as to whether it was actually a capital charge: thus Forsythe (1994) 381; this may have been so at the time of the Twelve Tables, but the aedilician procedure would suggest an offence punishable by a fine: Mommsen (1877/8) II. 491–495, Mommsen (1899) 772–773, 903.

[27] Graf (1997) 61–68, esp. 63–64, Ogden (2002) 277–278.

[28] Bonneville-Dardenne (1984) 218–222, 242 n. 184.

[29] Forsythe (1994) 378–380 discusses the possibility that Livy may have included it.

[30] Berti (1989) 45, 149, Forsythe (1994) 383–384. Smith (2007) 156–159 suggests that Piso attracts Pliny by 'his firm moral line' (159, cf. 160).

small *heredium*. The agricultural writers, moreover, discuss the sort of work that does not require to be done in day time, and propose tasks suited to *lucubratio antelucana* and to *uespertina*.[31] The sentence of direct speech in which Chresimus defends himself is the first speaking role within the book;[32] and has the gnomic quality of the various handbooks that Pliny cites throughout this section. Finally, the conclusion of the passage (*fertilissimum in agro oculum domini*) should be recognised as a proverb: it closely resembles one given at 18.31: *frontemque domini plus prodesse quam occipitium*, or, 'the master's face does more good than the back of his head'.[33]

So here is a tale which is to be located in the second century BC (and which contains sufficient pointers to enable this be to recognised); but one which has also been slightly tweaked by Pliny to suggest a vaguely remote date. And it incorporates at least one punning allusion to link the protagonist with the original author. Thus, not *quite* the simple thing it appears to be; and not quite from some golden age of self-sufficiency either.

What role, then, does this anecdote play as an *exemplum* within the *Natural History*? It neatly picks up many of the issues addressed in the preceding chapters of Book 18: the value of agriculture, the farmer's hard work and its appropriate timing, the derivation of names, even the theme of poison. So one of its functions is to conclude the first section of the book before Pliny proceeds (from *HN* 18.44 onwards) to practical advice on specific crops and farming practices.

Pliny signals it as *exemplum antiquitatis*: this might refer to the overall situation, or to the hearing of a case of *ueneficium* before the people, or more specifically to Chresimus himself as a *uir antiquus*. He is, notably, a person of humble status, scarcely one of those *antiqui* who farmed their small plots and yet were ready, in exemplary fashion, to answer when duty called them to command the forces of the *res publica*. Cincinnatus is of course the paradigm in this respect. Just a few chapters previously Pliny has indicated that such are the men who established the precepts (*praecipiebant*) addressed to good farmers: *triumphatores* who deemed it a crime to possess ten pounds of silver; who left just a single *uilicus*

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31 Varro *Rust*. 6.6, Columella *Rust*. 11.1.20, 11.2.12, Ker (2004) 217–218.

32 Ker (2004) 226.

33 Strömberg (1954) 68 discusses this 'family' of proverbs (found in both Greek and Roman sources), all of which allude to beneficial effects of the master's eye, face or step; he does not include *HN* 18.43 in the group.

in charge of their land (*rura sua*); whose *heredia* were looked after by the senate while they themselves commanded armies (*HN* 18.39). Chresimus resembles these men in devoting personal labour and effort to tilling his land;[34] by the fact that much of his hard work takes place at night he also recalls the author who has evoked him.

Pliny himself puffed in the preface how he spent wakeful nights at work (*HN* pref. 18). For him, to lucubrate was to read and write, to take notes and organise them.[35] As Ker has shown,[36] both Pliny's *praefatio* and his nephew's description of his habits stress the value of such night works. They figure this in terms of accountancy and accountability, reckoning and expenditure of time. The time thus frugally saved is offered back to the emperor transformed into a literary work: the *Natural History*. Hence a parallel can be drawn between the diligent, frugal and useful Chresimus, toiling at night works that result in crops for actual food, and the author himself, whose lucubrations support life. This parallel is confirmed by the conclusion to the prefatory portion (*HN* 18.1–5) of this book (*HN* 18.5):

> quorum aestimatione et gaudio nos quoque relictis exustioni suae istis hominum rubis pergemus excolere uitam, eoque constantius quo operae nobis maior quam famae gratia expetitur. quippe sermo circa rura est agrestesque usus, sed quibus uita constet honosque apud priscos maximus fuerit.
>
> By the value and enjoyment we have in these things [*sc*. of nature] we shall continue to cultivate life (while leaving these brambles of mankind to their own burning off)—all the more staunchly inasmuch as we gain greater *gratia* from the effort than from the renown. Indeed our talk is of the countryside and rural habits, but on these life depends, and on them was the greatest honour amongst men of old.

Pliny here plays with the notion of his work as a kind of cultivation: he himself is one who tends life (*excolere uitam*) by unstinting effort. The allusions to *uita* recall sections 12 and 18 of the *praefatio*.[37] Moreover, Chresimus' achievement is foreshadowed: he will prove to be one of those to whom *honos* … *maximus* is due. And *apud priscos* confirms Pliny's later unwillingness to date Chresimus' story with any degree of precision: Chresimus the outsider, freed slave, person of low status and

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[34] Beagon (1992) 168 n. 19: the story illustrates how *ratio* and *labor*, in accordance with nature, produce good results.

[35] Plin. *Ep*. 3.5.7–9, Henderson (2002b), Gibson in this volume.

[36] Ker (2004) 232–236.

[37] Ker (2004) 234.

from some dim distant past, not only challenges the values of his own contemporaries but also those of extravagant Romans of other epochs, including Pliny's own. Pliny, for his part, identifies himself as likewise dedicated to hard work, though in a vastly different field from the sturdy farmer.

L. Licinius Crassus and Trees

Trees form the subject of *Natural History* 16; and this topic continues in Book 17, which, as Henderson points out, lies in the 'hinge' portion of the work (Books 17–19), with a transition from nature pure to nature worked by man through agriculture and gardening.[38] This shift is signalled at the start of 17.1:

> natura arborum terra marique sponte sua prouenientium dicta est; restat earum quae arte et humanis ingeniis fiunt uerius quam nascuntur.
>
> The nature of trees growing of their own accord on land and sea has been stated; there remain those which are, more truly, *formed* by art and human cleverness rather than born.

An epoch of primeval competition is evoked by the second sentence: at one time, man, merely one animal among others, competed with wild beasts and birds for the tree fruits. Since then, however, trees have become indulgences, almost pets; and, amazingly, they cost the fancy prices of luxury favourites, as is shown by the famous example of L. Crassus and Cn. Domitius Ahenobarbus (*HN* 17.1):

> ... in tanta deliciarum pretia uenisse, clarissimo, ut equidem arbitror, exemplo L. Crassi atque Cn. Domitii Ahenobarbi.

The anecdote relates to the censorship of the two men in 92 BC.[39] Their tenure of office was marked by dissension (*iurgiis*); in the end they resigned without completing the lustrum.[40] The ongoing conflict between the two of them was publicly expressed in exchanges at one or more *contiones*: Crassus' witty retorts were remembered and much admired.[41] Pliny attributes their dissent to their vastly different temperaments (*propter dissimilitudinem morum*): Domitius, harsh and con-

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[38] See Henderson (2011).

[39] Domitius had been consul in 96 BC and Crassus in 95: Broughton (1951–1952) 1.9, 1.11.

[40] Broughton (1951–1952) 1.17.

[41] Testimonia in Malcovati (1953) 258–251, Fantham (2004) 42, 194, 199.

tentious,[42] and filled with hatred for his colleague, severely rebuked Crassus (*grauiter increpuit*) for living on so wealthy a scale (*tanti*). With the allusion to Crassus' *domus magnifica* on the Palatine,[43] Pliny adverts to a favourite theme: luxury houses, and whose was the best at any particular time.[44] That of Crassus, it transpires, while not actually the supreme house of its epoch,[45] was nevertheless worth the offer of an enormous sum from Domitius.[46] He made this offer repeatedly—and then Crassus turned round and accepted it (*HN* 17.4):

> et Crassus, ut praesens ingenio semper, ut faceto lepore sollers, addicere se respondit exceptis sex arboribus. ac ne uno quidem denario, si adimerentur, emptam uolente Domitio, Crassus: 'Utrumne igitur ego sum, inquit, quaeso, Domiti, exemplo grauis et ipsa mea censura notandus, qui domo, quae mihi hereditate obuenit, comiter habitem, an tu, qui sex arbores |LX| aestimes?'
>
> And Crassus, who always had a ready wit and was clever at neat repartee, replied that he agreed—with the exception of six trees. But Domitius was not prepared to buy even at the price of a single denarius if the trees were not included. 'Well now, I ask you, Domitius, whether it is I who am the bad example, deserving a black mark in my own censorship[47]—I who in an agreeable fashion inhabit a house which I inherited, or you, who value six trees at six million sesterces?'

Pliny's wording brings out not only Crassus' wit, but also his situation and character. The fact that he has inherited the house means that he is not a nouveau riche purchaser.[48] His lifestyle (*comiter habitem*) is borne out by his depiction in Cicero's works.[49] He is neatly characterised by

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42 Also unfeeling and proud (according to other allusions derived from Crassus' quips: Suet. *Ner.* 2, Cic. *De or.* 2.242).

43 Carandini (1988) 360–373; Steinby (1993–1999) 2.128 (E. Papi): Crassus' *domus* was later incorporated into Scaurus' (26); Tomei (1992), with plan (928); Guilhembet (2002).

44 *HN* 36.109–115; cf. 36.6–8, with Isager (1991) 146.

45 It was surpassed both by that of Q. Lutatius Catulus (cos. 101 BC), and that of C. Aquilius, *eques Romanus*, the best of its age.

46 The text at 17.5 reads one million; Mayhoff, followed by the Budé editors, emended this to six million, on the basis of Val. Max. 9.1.4: *sexagies sestertio*. The anecdote is shaped differently there, as Domitius reckons the loss of the trees reduces the value by half.

47 On the censorial *nota*, see Lintott (1999) 71–72.

48 This recalls T. Pomponius Atticus, whose house, inherited from his uncle, was likewise notable for its pleasant location and wooded grounds (*silva*): Nep. *Att.* 13.2, Horsfall (1989) 87–88.

49 The setting of Cicero's *De oratore* gives a notion of Crassus' *comitas* during leisure periods; and the likening of Crassus' well-furnished mind to a well-furnished house (*De or.* 1.161) is surely a delicate compliment to his actual dwellings.

Cicero as *elegantium parcissimus*[50]—elegant economy is evidently the watchword: no extravagance, but everything superbly appropriate. This is not necessarily the luxury of the exotic;[51] it is the luxury of what is best—and what is best can sometimes be expensive; at other times it may even be beyond price.

It is worth recalling that in other respects Crassus is attributed with elegant connoisseurship: fish, earrings, vintage wines and baths all figure in his lifestyle as described by Pliny and others. He and his coevals represent the generation which first enjoyed the refinement of luxury, luxury which developed over the course of about a century. This is well brought out in a Plinian train of thought triggered by a noteworthy instance (*memorandum … exemplum*) of the longevity of fishes (*HN* 9.167). The particular fish in question was thrown from the hand of Vedius Pollio at his estate Pausilypon, and it well outlived him, who died in 15 BC. Then the mention of *piscinae*[52] causes Pliny to pass on to the topic of oyster farming, which is specifically noted as originating in the age of Crassus (*HN* 9.168):

> ostrearum uiuaria primus omnium Sergius Orata inuenit in Baiano aetate L. Crassi oratoris, ante Marsicum bellum.
>
> Sergius Orata first created oyster ponds on his Baian estate at the time of L. Crassus the orator, before the Marsic war.

Thence to oyster provenance, and the practicalities of supplying gourmet foods, and finally to other types of fish-farming (*HN* 9.170):

> Eadem aetate prior Licinius Murena reliquorum piscium uiuaria inuenit, cuius deinde exemplum nobilitas secuta est Philippi, Hortensi.
>
> At the same period, the elder Licinius Murena invented fishponds for the other breeds of fish; the notability of Philippus and Hortensius followed his example.

From the ironic praise of these notables and their choice of *exemplum*, it is a short step to Lucullus, the Roman Xerxes, who cut through a mountain to provide a sea-water channel to his *piscinae*. Thence to Hirrius, first breeder of morays, who lent Caesar for his triumphal banquets 6,000 of

[50] Cic. *Brut.* 148 *Crassus erat elegantium parcissimus, Scaevola parcorum elegantissimus; Crassus in summa comitate habebat etiam seueritatis satis, Scaeuola multa in seueritate non deerat tamen comitas.*

[51] Wallace-Hadrill (1990), Murphy (2004) 96–99, Smith (2007) 163.

[52] Higginbotham (1997).

these fish, more valuable than mere money (*HN* 9.171). Another step brings us to Hortensius' and Drusus' *amor* for individual fish: they loved them as pets, they adorned them with earrings (*HN* 9.172; cf. 32.16). While the discourse is of growth of luxury, the temporal markers are of war.[53] These are Rome's notables, her leaders, her *nobilitas*, in her most crisis-ridden century: they are depicted as taking enjoyment in recherché foods and drinks and as playing with their pets. Later Plinian passages reveal Crassus as owner of some chased cups by Mentor which he does not even use, *propter uerecundiam* (*HN* 33.147);[54] and of bronze-decorated dining couches (*HN* 34.14).

Other sources similarly depict L. Crassus as involved in these various behaviours. He too had fish as pets, and greatly mourned the death of a favourite.[55] He has been convincingly linked in a nexus of acquaintanceship with L. Sergius Orata the fish-farmer,[56] and Asclepiades of Bithynia the physician.[57] Together they indulged in and celebrated what Tchernia has termed the *Venus—balnea—uinum* complex. They were the first generation to develop connoisseurship in wines of specific provenance and vintage;[58] they built private baths for health and for enjoyment. All this may be indulgence, but not grossness or gourmandising: it is characterised by elegance and taste.

To return to the story of Crassus, Domitius and the trees: Pliny proceeds to intervene with the authority of autopsy (*HN* 17.5)[59] to stress how notable these particular *lotos* trees were, with their lavish spreading shady branches.[60] He has often seen them in his youth, when the house belonged to the distinguished Caecina Largus (*Caecina Largo e proceribus*). Then man in the person of the emperor Nero killed these long-lived wonders as he killed so much else.[61]

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53 See Ash in this volume.

54 Isager (1991) 71.

55 Ael. *NA* 8.4: the fish were adorned with jewels; they recognised Crassus' voice; Domitius reproached him for mourning when they died: cf. Macr., *Sat.* 3.5.4–5.

56 D'Arms (1970) 18–22, 40–42.

57 Tchernia (1997).

58 *HN* 14.59–79.

59 Ash (2007) 6–7 on autopsy and witnessing; Marincola (1997) 63–86, esp. 82–86.

60 This deciduous species (*celtis australis*, the nettle-tree) was valued both for summer shade and for its cherry-like fruit: *HN* 13.104–106, 16.123–124. On the ambivalent value of shade, see *HN* 12.11–12, with Beagon (1992) 81.

61 Beagon (1992) 17–18; and on *hostis generis humani* (*HN* 7.45–46), see Beagon (2005) 198–199.

Crassus' garden and its trees constitute another marker of refined luxury. From the Roman viewpoint, to have any garden at all in a town setting signifies wealth and status.[62] Thus it is not surprising that gardens play an important and slightly ambivalent role in Pliny's work. He approves of productive gardens, which, blending practical use with pleasantness, are crucial to Roman identity,[63] but what of gardens where art comes into play? Leaving aside the imitation, by means of painting, of plants and gardens,[64] there is also the question of gardens where art imposes design upon nature.

The garden of Crassus' *domus magnifica* appears to be one such, inasmuch as features in house and in garden refer to one another. Pliny assures the reader that the trees were by no means the sole attraction of the dwelling (*HN* 17.6):

> ac ne quis uilem de cetero Crassi domum nihilque in ea iurganti Domitio fuisse licendum praeter arbores iudicet, iam columnas VI Hymettii marmoris aedilitatis gratia ad scaenam ornandam aduectas in atrio eius domus statuerat, cum in publico nondum essent ullae marmoreae: tam recens est opulentia! tantoque tunc plus honoris arbores domibus adferebant ut sine illis ne inimicitiarum quidem pretium seruauerit Domitius.

> And let no one judge that Crassus' house was in other respects a poor one and that there was nothing except the trees to give scope to Domitius' reproach. Indeed Crassus had already set up six columns of Hymettian marble, which he had imported for the purpose of adorning a theatre for his aedileship, at a time when there were not yet marble pillars in any public place: so recent is opulence! And at that date trees conveyed so much more distinction to houses that without them Domitius would not abide by the price set by his personal hostility.

The columns of Hymettus marble were evidently one of the highlights of a famously lavish set of aedilician games.[65] These particular columns are mentioned later (*HN* 36.7), and their number is then stated as six.[66] This makes the emendation of the text at 17.6 from IV to VI a plausible one. If then, the number of trees and of columns conform, the elegance of cultivated nature outside was matched by the elegance of Hymettus

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[62] Grimal (1984), Jashemski (1979), Farrar (1998) 15–21 (cf. 21–26), Vitr. *De arch.* 5.9.5, 6.5.1 (with Farrar (1996) 5).

[63] *HN* 19.49–59 with Carey (2003) 103, Noè (2003).

[64] Carey (2003) 102–107, 111–133.

[65] Cic. 2 *Verr.* 4.133, *Off.* 2.57; Crassus' colleague Scaevola displayed lions (*HN* 8.53).

[66] Val. Max. 9.1.4 has ten trees and ten columns. On this problem, see Münzer (1897) 329.

marble inside. This may well reflect deliberate integration of architectural, landscape and planting features, as was commonly practised in garden design.[67] Certainly, not long after Crassus' epoch, careful attention was paid to the association between porticos and their plantings.[68] Pliny may be indicating some such relation in this *exemplum*. He is certainly interested in the interplay between art and nature, reality and artifice.[69] Thus the trees are not valued just as themselves, but in context: this raises the question of valuing (and pricing) natural objects as works of art.[70]

The *exemplum* of Crassus, Domitius and the trees has a self-reflexive character. Introduced as it is by the words *clarissimo … exemplo* (*HN* 17.1) the reader might expect a tale of the great and the good, an example to be followed. The *exemplum* is, however, rendered problematic when Crassus neatly puts his colleague-adversary on the spot: chidden severely (*grauiter*) for extravagance, he can justly ask which of them now provides the *exemplo grauis*? To live agreeably (*comiter*) in an inherited house with a pleasant garden is supremely respectable and reasonable;[71] to value a few trees at the price of works of art is the real extravagance.[72] But Crassus too has, in a sense, valued those trees beyond money, by proposing to retain them: it is Domitius who has crudely set a precise monetary value on them by going back on his offer. The works of nature are wonders, *mirabilia*; but they can also be regarded as commodities, and fetch a fancy price.[73]

This make Crassus' question *utrumne igitur ego sum … exemplo grauis … an tu?* a difficult one to answer. In the immediate context of the anecdote as related in *HN* 17.1–6, Domitius appears to come off worst. He is beaten by the wit which deftly identifies him as the bad example: the financially extravagant one, rating six trees as worth 6 million sesterces. That is to understand the anecdote as embodying a genuine offer on Domitius' part: made seriously, it is refused seriously (while at the same

[67] Cic. *Q. Fr.* 3.1.1–5 (with reference to villa gardens), Andreae (1996) 96–103.

[68] Vitr. *De arch.* 5.11, Farrar (1996) 13–19, Farrar (1998) 27–63.

[69] Carey (2003) 111, 126, 131.

[70] Beagon (1992) 76–79, 192–194 on prices and values.

[71] Pliny regards gardens as an appropriate use of *ars* to promote harmony: Beagon (1992) 79–85.

[72] De Oliveira (1992) 162–163 points out that Crassus has set Domitius a trap, and holds that Crassus is pointing to himself as the *exemplum* to be followed while Domitius is the model to avoid.

[73] Beagon (2007), esp. 29–31; see Lao in this volume.

time wittily). Considerations in support of this are the following: the mention of *aemulatio* (suggesting real rivalry over possessions); the allusion to *inimicitia*, and the *honos* accruing to the house because of its trees. On this reading, Domitius is the profligate one of the pair in monetary terms, while Crassus is the one whose sensibilities take no account of mere money, but who pays regard rather to the beauty, charm and amenity of the trees.

On an alternative reading, Domitius' offer would not be a serious one: he would be making it as a kind of scolding ploy (*iurganti*). This would also fit better with his reproaching Crassus for living on so grand a scale (*tanti*), for then Domitius would not be guilty of an acquisitive desire for the house and its trees. Thus, Crassus would be pretending to understand as serious an offer that in reality he knew very well was made as a mere disputing tactic: he turns it down with his mock-serious question as to the bad example.

Thus, whether Domitius' offer is in fact serious or non-serious, by treating it *as if serious* Crassus comes off best within the framework of the tale as narrated on this particular occasion. But Pliny gives cause to doubt as to whether Crassus has the best of it in the larger context. On either reading Crassus is the one displaying a refined sensibility that values the works of nature as works of art: the consummate height of luxury. *Tam recens est opulentia*, reflects Pliny, undoubtedly with irony. A mere 170 years: the good old days. Well may Crassus ask which of them is *exemplo grauis*: here are republican values in all their ambiguity.

The doubt about Crassus raised here in the altercation with Domitius is reinforced when a closely related anecdote occurs later. Pliny is wondering why there was never a ban on the import of foreign marble—for example, to prevent at least its private use (*HN* 36.4–6). He raises the possibility of its legitimate employment in public buildings or for civic celebrations (e.g. games): *sed publicis nimirum indulgentes uoluptatibus* (*HN* 36.5). That this is ironic rather than serious seems to be reinforced by the almost immediate repetition: *uerum esto, indulserint publicis uoluptatibus* (*HN* 36.6). At any rate Pliny describes how M. Scaurus (the aedile of 58) had 360 Lucellean marble columns in his temporary theatre and then reused them in his house. But, Pliny notes, he had a precedent in Crassus (*HN* 36.7–8):

> iam L. Crassum oratorem illum, qui primus peregrini marmoris columnas habuit in eodem Palatio, Hymettias tamen nec plures sex aut longiores duodenum pedum, M. Brutus in iurgiis ob id Uenerem Palatinam appellauerat. nimirum ista omisere moribus uictis, frustraque interdicta quae

uetuerant cernentes nullas potius quam inritas esse leges maluerunt. haec atque quae secuntur meliores esse nos probabunt. quis enim hodie tantarum columnarum atrium habet?

Already L. Crassus the orator, the man who was the first to have columns of foreign marble on that very Palatine (Hymettian ones, however, and no more than six in number nor longer than twelve feet) had been chidingly called on that account 'Palatine Venus' by M. Brutus. No wonder these matters were disregarded when morals had lost; and realising that bans were in vain, they preferred to have no laws rather than ineffective laws. Such things and those that followed will show that we are better. For who nowadays has an atrium with such large columns?

The Marcus Brutus who figures in this story held no office but specialised in prosecution: a Roman Lycurgus, as it were.[74] He crossed swords with Crassus when the latter defended Cn. Plancus (probably in 91 BC). Cicero recalls Crassus' speech with admiration in *De oratore* 2.220–226, but naturally gives little of M. Brutus. Elsewhere, terming him *accusator uehemens et molestus*, he launches a vigorous attack upon his character and behaviour (Cic. *Brut.* 130). Both Cicero's first adjective and Pliny's allusion to *iurgiis* evoke the characterisation of Domitius: *uehemens natura* (*HN* 17.3) and *iurganti* (*HN* 17.6).

Thus in *HN* 36.7 Pliny is designedly recalling the earlier reproaches directed at Crassus. But their seriousness is considerably intensified by M. Brutus' sobriquet 'Venus Palatina'. This combines opprobrious allusion both to Crassus' house and to his character.[75] To term a Roman male 'Venus' must be a dire insult.[76] It might perhaps relate the house's décor to that of a luxurious temple, although not necessarily that of Aphrodite at Cnidus.[77] The allusion may be closer to home: two of the Venus temples (Obsequens and Verticordia) which at that date existed in Rome were linked with unchastity and sexual dishonour, while the temple of Venus Erucina was frequented by prostitutes (Ov. *Fast.* 4.865–870).[78] Another possibility is the implication that Crassus is unduly given

[74] Testimonia in Malcovati (1953) 207.

[75] Cf. Cic. *Cael.* 18 of Clodia: *hanc Palatinam Medeam*.

[76] Oratory made frequent play with names: Corbeill (1996) 74–76, 148, 167–168 (an instance of repartee).

[77] This is the suggestion *ad loc.* by the Budé commentator, Rouveret, comparing the temple on Cnidus (*HN* 36.21).

[78] Richardson (1992) 408–411.

to sexual activity[79] or is the object of sexual attentions.[80] His known association with Venus, baths and wine[81] may thus be at issue.

This insult, whatever its exact purport may be, is the harshest and most explicit judgement upon Crassus' lifestyle; but it is not the last allusion to his house and its columns. That comes in the course of describing (*HN* 36.113–115) that mad extravagance, M. Scaurus' consummately lavish theatre with its 360 marble columns: ... *in ea ciuitate quae sex Hymettias non tulerat sine probro ciuis amplissimi*, '... in the state which had not put up with six Hymettian columns without reproach to an eminent citizen' (*HN* 36.114).[82]

Crassus is not named here, but clearly Pliny expects the object of this judgment to be identified. All in all, the verdict is considerably more favourable, somewhat modifying the impression made by the first and second occurrences of the story of the columns. Yet the fact that the opprobrious version was recounted at the outset of *HN* 36, in relatively close proximity to the present passage, should mean that Pliny expects his readers to recall the *iurgia* and the insulting sobriquet 'Venus Palatina'. Crassus counts as *ciuis amplissimus* only in comparison with M. Scaurus.

Conclusion

Thus, with Plinian exempla, it is sometimes hard to tell whether a particular *exemplum* denotes a good thing or a bad, something to be followed or something to be avoided. Even a seemingly simple *exemplum* such as that of Chresimus, where the general purport of the story is not in doubt, can comprise intricate allusions and require attentive reading. The case of L. Crassus, viewed in manifold *exempla* and other allusions, demonstrates how ambiguous are the *exempla*: even as they seem to offer models, they resist final interpretation. Playful, even wilful, Pliny's rhetoric is no simple phenomenon, and there is subtle strategy in his deployment of *exempla*.

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[79] *uenus* can occasionally be used in the senses of (1) penis; (2) clitoris; and, more often, (3) coitus: Adams (1982) 57, 98, 188–189.

[80] See *OLD* s.v. 1(b), as applied to *women* who inspire love. The more usual accusation against political or forensic opponents is sexual effeminacy, for which see Richlin (1992) and Santoro L' Hoir (1992), but 'Venus' does not seem to carry this implication.

[81] Tchernia (1999): see above, at n. 57.

[82] Isager (1991) 144–147.

CHAPTER ELEVEN

ELDER AND BETTER: THE *NATURALIS HISTORIA* AND THE *LETTERS* OF THE YOUNGER PLINY[1]

Roy K. Gibson

This chapter looks at the early reception of the *Natural History* in the *Letters* of Pliny's nephew and adopted son, and tackles two main issues. First, I offer evidence against the assumption that the Younger Pliny cared little about or had scant knowledge of the actual contents of the *Natural History* and, more importantly, argue that the Younger expected his readers to be familiar with the text of that work. That is to say, the Younger's pride in his uncle's monumental work was not meant to be an abstract or purely family affair, but was an occasion which demanded textual engagement from his own readership. Secondly, I look at the puzzle of the Younger's own placement of the *Natural History* in final position as the crowning *opus* of Pliny's literary career (in *Ep*. 3.5), in direct contravention of the latter's estimate of the relative value of his final works in the preface to the *Natural History*.

The Natural History *of Pliny the Younger*

It may seem obvious to begin a study of the *Natural History* in the *Letters* by looking at the Younger's description of natural phenomena in his correspondence.[2] In his standard commentary on the Younger, Sherwin-White points the way in his retrospective summary comments on a letter late in the collection (*Ep*. 8.20), where the remarkable floating islands of Lake Vadimon in Umbria are described by the Younger in detail ((1966) 473):

[1] All translations are taken or adapted from J.F. Healy or the Loeb edition (for the Elder Pliny), from B. Radice or P.G. Walsh (for the Younger Pliny), and from A.G. Lee (for Catullus).

[2] Inquiries into the natural environment are a consistent and notable feature of the Elder's work: I do not mean to suggest that the *Historia Naturalis* is to be understood as a 'natural history' in the modern sense.

> This taste for natural wonders, which Pliny shared with his uncle, produced Seneca's *Natural Questions* and his uncle's *Natural History*. Pliny contributes 4.30 Larium, 6.16, 6.20 Vesuvius, 7.27 ghosts, and 9.33 the dolphin of Hippo, as well as this letter and 8.8, the fountain of Clitumnus. In these Pliny shows himself exact as an observer and recorder, and cautious and unexaggerated according to his lights. His speculations are seldom silly . . .

Sherwin-White conveniently constructs for the reader a kind of Pliny the Younger's *Natural History*—somewhat ironically, through the Elder's characteristic method of excerption (*Ep.* 3.5.10)—and hints at his view of the Younger as often a more trustworthy recorder of natural phenomena than his uncle. Certainly, if the letters listed here by Sherwin-White are studied through the prism of his commentary, then an interesting narrative begins to emerge. For example, on the Younger's description of a miraculous spring on the shores of his native Lake Como (*Ep.* 4.30), Sherwin-White (1966) 310 comments, 'Its characteristics are described less accurately by the Elder Pliny, in *NH* 2.232 . . .', although he goes on to note that the Younger's explanation of the phenomenon (as opposed to his description of it) is heavily dependent on Pliny's theory 'that the world has its own breath, which causes natural phenomena: *NH* 2.102 ff.'. More germane to present purposes, however, are Sherwin-White's further comments on the Lake Vadimon letter: '[Vadimon] is mentioned by the Elder Pliny, *NH* 2.209, and by Seneca, *Q.Nat.* 3.25.8, in discussions of floating islands . . . though neither had visited it. It is *noteworthy* that Pliny . . . is not acquainted with his uncle's description of such islets'.[3] That the Elder Pliny had not visited the floating islands of Lake Vadimon is not a necessary inference from their description in the *Natural History*;[4] no doubt this is Sherwin-White's way of throwing emphasis on the fact that the Younger bases his own account of the lake on a personal visit: *ipse certe nuper, quod nec audieram ante nec uideram, audiui pariter et uidi* . . ., 'I myself quite recently heard of and witnessed something I had never heard of nor seen before' (*Ep.* 8.20.3). At any rate, Sherwin-White also draws the reader's attention to the Younger's apparent ignorance of the relevant passage of Book 2 of the *Natural History* on the many floating

[3] (1966) 472 (emphasis added).

[4] *HN.* 2.209 *quaedam insulae semper fluctuantur, sicut in agro Caecubo et eodem Reatino, Mutinensi, Statoniensi, in Vadimonis lacu* . . ., 'certain islands are always afloat, as in the districts of Caecubum and Reate mentioned above and Modena and Statonium, and in lake Vadimo . . .'.

island of Italy (and Lydia and Illyria). Once again, the conclusion may be too sharply drawn: rather than surmising ignorance, it would be fairer to say that the Younger simply does not refer to his uncle or his work here (significant in itself, perhaps).

On the well-known letter on the African dolphin in the final book of the private correspondence (*Ep.* 9.33), Sherwin-White (1966) 514 comments, 'There are considerable differences in minor details … and only one verbal echo … Pliny contradicts his uncle on a major point in s. 9 … .'[5] What seems to have been nagging at Sherwin-White since at least the Lake Vadimon letter finally surfaces in a further comment on 9.33: 'One wonders whether Pliny could have endured to read his uncle's immense and inelegant book.'[6]

The Younger Pliny is not the only member of immediately succeeding generations to stand accused by modern scholarship of failing to benefit from the *Natural History*, since Suetonius is found wanting in a similar respect in his *De Grammaticis et Rhetoribus*.[7] But the accusation is a more serious one in the case of the Elder's adopted son. And here begins the argument of this chapter: that the Younger was, on the contrary, a close and careful reader of the *Natural History*, and—more importantly for the history of the reception of Pliny's great work—expected his best readers to be similarly inclined. But to discover such close engagement by the Younger we must look away from the 'natural history' letters to another 'local' topic closer to the heart of the former and something of an irritant to the Elder Pliny, namely Catullus and the cultural prestige of poetry.

Catullum conterraneum meum

In 1.16, the Younger writes to Erucius Clarus—a relation by marriage of the Septicius Clarus to whom the *Letters* are dedicated—in praise of a Transpadane, their mutual acquaintance Pompeius Saturninus (*Ep.* 1.16.3–6):[8]

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[5] Cf. the similar judgement of Syme (1969) 215 n. 5 = (1979) 754 n. 5.

[6] (1966) 514. Sherwin-White here participates in the tradition of castigating the Elder for his literary style; cf. Wight Duff (1959) 308. Pinkster (2005) shows that such criticisms are misplaced; cf. Damon in this volume.

[7] See Kaster (1995) 345.

[8] Pompeius Saturninus is a literary man and perhaps municipal *curator* in northern Italy near Comum; see Syme (1985a) 337–338 = (1988) 454–455.

> senties quod ego, cum orationes eius in manus sumpseris, quas facile cuilibet ueterum, quorum est aemulus, comparabis. idem tamen in historia magis satisfaciet uel breuitate uel luce uel suauitate uel splendore etiam et sublimitate narrandi. nam in contionibus eadem quae in orationibus uis est, pressior tantum et circumscriptior et adductior. praeterea facit uersus, *quales Catullus meus aut Caluus*, *re uera quales Catullus aut Caluus*. quantum illis leporis dulcedinis amaritudinis amoris! inserit sane, sed data opera, mollibus leuibusque *duriusculos* quosdam; et hoc quasi *Catullus aut Caluus*. legit mihi nuper epistulas; uxoris esse dicebat. Plautum uel Terentium metro solutum legi credidi. quae siue uxoris sunt ut affirmat, siue ipsius ut negat, pari gloria dignus, qui aut illa componat, aut uxorem quam uirginem accepit, tam doctam politamque reddiderit.
>
> You will feel the same when you have a chance to handle his speeches and compare them with any one of the older orators to whose standards he aspires. His histories will please you even more by their conciseness and clarity, the charm and brilliance of their style and their power of exposition, for the words he puts into the mouths of his characters are as vivid as his own public speeches, though condensed into a simpler and terser style. He also writes verses in the style of my own Catullus, or Calvus, which might indeed be the verse of Catullus or Calvus, for these are full of wit and charm, bitterness and passion; and, though he sometimes strikes a harsher note in the even flow of his measures, it is done deliberately and in imitation of Catullus and Calvus. He has recently read me some letters which he said were written by his wife, but sounded to me like Plautus or Terence being read in prose. Whether they are all really his wife's as he says, or his own (which he denies), one can only admire him either for what he writes or for the way he has cultivated and refined the taste of the girl he has married.

The emphasis here placed on the verse of Catullus and Calvus is remarkable, for their names are repeated three times within a very short space; Plautus and Terence do not attract the same repeated attention (as epistolographical models), much less the nameless orators who are Saturninus' rhetorical models. On the first occasion, the possessive adjective *meus* is dropped beside Catullus, perhaps to underline shared Transpadane origin or particular stylistic approbation from the Younger.[9] More significantly, Pompeius Saturninus' imitation of the verses of Catullus and Calvus is said deliberately to preserve some of the artistic 'harshness' of his models by inserting among the *molles uersus* some *duriusculi uersus*. The latter, rather striking, adjective catches the eye.[10] *TLL* 5.2293.61–

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[9] Cf. the poem by Sentius Auginrinus quoted at Plin. *Ep*. 4.27.4 vv. 2–3 *meus Catullus | et Caluus*, where *meus* may be interpreted as implying common regional origins (see Birley (2000) 88 s.v. Sentius Augurinus).

[10] The adjective *durus* had routinely been applied to poetry since Augustan times; see

67 confirms that *duriusculus* is attested in the entirety of surviving Latin only twice: once in the Younger's letter and once in the opening sentences of the prefatory epistle to the *Natural History* (*HN* pref. 1):[11]

> libros Naturalis Historiae, nouicium Camenis Quiritium tuorum opus, natos apud me proxima fetura licentiore epistula narrare constitui tibi … namque tu solebas nugas esse aliquid meas putare, ut obiter emolliam Catullum conterraneum meum (agnoscis et hoc castrense uerbum): ille enim, ut scis, permutatis prioribus syllabis *duriusculum se fecit quam uolebat* existimari a Veraniolis suis et Fabullis.
>
> I have decided to tell you, in this rather presumptuous letter, about my most recent production, my books of Natural History, a novel venture for the Muses who inspire your Roman citizens … 'For you used to reckon my little efforts of some worth'—to soften, en passant, my 'oppo' Catullus (you recognise this army slang); for, as you know, by changing around the first syllables of line four of his first poem, he made himself a little harsher than he wished his 'good chums the Veraniuses and Fabulluses' to think him.

Like the Younger (*Ep.* 1.16.5 *Catullus meus*), the Elder Pliny communicates a special link with the poet from their shared homeland of Northern Italy: *Catullum conterraneum meum*. The adjective here chosen to underline that link is, like *duriusculus*, an exceedingly rare one.[12] But where the Younger's Pompeius Saturninus (yet another Transpadane) deliberately introduces *duriusculi uersus* into his otherwise *molles* lines in a careful imitation of Catullus, the Elder Pliny finds it necessary to soften (*emolliam*) Catullus by rearranging the original hendecasyllables so as to save the poet from appearing *duriusculus*. Thus *meas esse aliquid putare nugas* is rewritten by the Elder as *nugas esse aliquid meas putare*, in keeping with

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TLL 5.2310.58 ff. But *duriusculus* is not attested in this sense before Pliny, and the present example is the only instance in the stylistically careful Younger of -*culus* on a comparative stem.

[11] For a more detailed reading of the following passage, see Morello in this volume, who also focuses more broadly on the epistolary qualities of the preface; cf. also Damon and Schultze in this volume on the preface.

[12] *TLL* 4.826.11–14 ('is qui eiusdem ciuitatis est') cites otherwise only an early version of the Bible: Itala *Leu.* 17.15 (Wirc.) *inter conterraneos* (αὐτόχθοσιν, Vulg. *Indigenis) aut inter proselytos*. Although glossed by the Elder as military slang (cf. *contubernalis*, *commiles* etc.), *conterraneus* clearly possesses the root meaning of 'fellow-landsman'. His sarcastic claim of kinship between a native of Comum and a native of Verona reverses both geographically and emotionally the link which Catullus claims himself with Caecilius of Comum in poem 35 (quoted below n. 17). For regional pride shared between even widely separated northern Italian cities (and frequently attested in the Younger, e.g. 7.22.2), see Syme (1968) 136–137 = (1979) 696–697, also Wiseman (2007) 58–59.

contemporary tastes for an initial spondee.[13] As a result, Pliny combines sarcasm with the implication that he is not, in fact, insensitive to poetry. Catullus' words, appropriately enough for the Elder's prefatory epistle, are taken from the dedicatory lines prefixed to the poet's collection (1.4).[14] Furthermore, in the epistle as a whole Pliny is clearly determined to assert the primacy of prose writers (particularly Cato and Varro) at the expense of poets.[15] The sarcasm directed against Catullus is part of this larger literary programme, as Howe argues in his classic article on the prefatory epistle ((1985) 569):

> His use of [*musinamur* ('occupy myself with these trifles'), at *HN* pref. 18] is clearly a respectful allusion to Varro and to his commitment to the scholarly life, but it also seems a further, uncharitable allusion to the *nugas* of Catullus. ... Writers of useful works, Pliny implies, have the right to speak of them in a trifling way, for no serious reader would judge Pliny or Varro as writers of *nugae*, any more than he would treat Catullus with undue seriousness. It is almost as if Pliny resented Catullus' larceny of a trope to which he had no right, because by doing so the poet appropriated some of the honor that should be reserved for the serious prose writer.

In sum, sarcasm is ladled onto Catullus in the service of the Elder's programmatic commitment to raising the status of 'useful' prose and mounting an attack—observable elsewhere in the *Natural History*—on the cultural prestige awarded to poetry.

The Younger's allusion to the opening sentences of the *Natural History*, through the vanishingly rare adjective *duriusculus*, is both unmistakable and pointed. Here we find the Younger, in an early letter of his own,

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[13] Morgan (2007) 126. For the 'softening' of Catullus and for the latter as *conterraneus*, see also Morello in this volume.

[14] One might also note the virtues of another prose work—the *Chronica* of Cornelius Nepos—praised in the immediately following lines of this same dedicatory poem from Catullus: *iam tum, cum ausus es (unus Italorum) | omne aeuum tribus explicare cartis | doctis, Iuppiter, et laboriosis*, 'even when you dared (the one Italian) | unfold the whole past in three papyri—| learned, by Jupiter, and laborious!' (1.5–7). Claims for remarkably similar features in the *Natural History* are made by Pliny later in his prefatory epistle. For daring and Italian originality, cf. *HN*. pref. 14; for the miracle of explanatory comprehensiveness and compression, plus industry or learning, cf. *HN*. pref. 17. Pliny, we might infer, is a better versifier than Catullus, and in prose equal to (more likely, better than) Cornelius Nepos. On the parallels between Nepos and the Elder Pliny, see also Morello in this volume.

[15] See Howe (1985) 563. On Pliny's hostility to, and rivalry with, Vergil, see the important contribution of Bruére (1956). Doody (2007) emphasizes that the Elder's hostility to Vergil is related to his general attitude to poetry, which for him is not 'a respectable means of relating factual information' (op. cit. 197). For an analysis of the rhetoric of the Elder's prefatory epistle, see also Sinclair (2003).

pointedly revising the literary judgement of the Elder as expressed in the prefatory epistle to his 'greatest' work. The latter's sarcastic redemption of Catullus from artistic 'harshness' is countered by the Younger with a celebration of an imitation of that same quality. In particular, the use of *duriusculus* in the context of versification in the style of Catullus invites the reader of *Ep.* 1.16 to remember the Elder's rather different literary programme as expressed in an epistle of his own, and to grasp the Younger's implied rejection of it in this new letter. For *duriusculus* summons up the Elder's hostile attitude towards poetry and his elevation of communally 'useful' prose. By contrast, where the Elder would create a hierarchy of genres, in *Ep.* 1.16 the Younger praises a variety of prose genres (including epistles) and 'trivial' poetry without creating any sort of hierarchy for ranking their prestige or importance. All Saturninus' literary works are placed in a horizontal sequence, where none outranks the others in aesthetic interest or appeal. This positioning of Catullan poetry within such a list is perhaps another example of the Younger's sanitization of the poet brilliantly identified by Matthew Roller.[16] But the emasculation of Catullus is here not an end in itself, but rather the shaping of a tool in a contest with the Elder. The Younger's Catullus is designed to render irrelevant and otiose the sarcarsm and hostility of the Elder towards the poet.[17]

The Younger and the Reception of the Natural History

The example given above of the Younger's engagement with the text of the *Natural History* is admittedly small-scale. But there are a number of important conclusions to be drawn from it. First, the Younger's revision

[16] Roller (1998).

[17] There is perhaps a further layer to the differing attitudes of the two Plinies to Catullus. Note the opening to a Catullan verse epistle: *poetae tenero, meo sodali,* | *uelim Caecilio, papyre, dicas* |*Veronam ueniat, Noui relinquens* | *Comi moenia Lariumque litus*, 'I'd like you, papyrus, to tell my comrade | Caecilius, the tender poet, | to come to Verona, leaving Novum | Comum's walls and the Larian shore' (35.1–4). As noted earlier (n. 12), this type of regional fellow-feeling between writers in Comum and Verona is the object of sarcasm when the Elder dubs Catullus *conterraneus meus*. But it will have been open to the Younger to see here evidence of and precedent for a sophisticated poet in the Catullan mode at Comum, virtually from the moment of its re-foundation (as Novum Comum) in 59 BC. Furthermore the Younger (C. Plinius Caecilius Secundus), unlike his poetry-hating uncle (C. Plinius Secundus), was a Caecilius, and—although that name was extremely common (Syme (1985b) 195 = (1988) 644)—it may have pleased the Younger's fancy to see in the Caecilius of Catullus 35 a blood ancestor as well as a literary one.

of the Elder's literary programme involves neither an inclination to ignore the *Natural History* nor an attitude of deference towards his Uncle (like that to be found in the Vesuvius letters). Rather, this is positive and argumentative engagement. Secondly, we may take note of the subtlety of that engagement: the Younger expects a single (rare) word to make his point for him. *And* he clearly expects his reader to be familiar enough with the *Natural History* to follow his point. As suggested at the beginning of this paper, the Younger's pride in the *Natural History* was not meant to be an abstract or purely family affair, but rather an occasion which demanded textual engagement from his own readership.

A closer look at the *Letters*, I suggest, will find many more examples of such expectations and demands. As further (and brief) illustration, I sketch in two examples from Book 5.[18] Both take their origin from Sherwin-White's commentary—the man who wondered whether the Younger 'could have endured to read his uncle's immense and inelegant book'—but where Sherwin-White did not develop the implication of his 'parallels'.[19] In *Ep.* 5.3 the Younger Pliny defends his practice of composing light verse on the ground of senatorial precedent, and lists by name over seventeen senatorial versifiers. Here it may be argued that the Younger is deliberately using a characteristic mannerism of the *Natural History*—the learned list of practitioners[20]—to defend a practice to which the Elder appears to have been implacably hostile. Again, readers are asked and expected to be familiar enough with the text and techniques of the monumental work in order to appreciate the wit and force of the Younger's self-defence. The second example is from *Ep.* 5.6 on the Younger's Tuscan villa. That the Younger inherited the villa from the Elder has long been suspected by historians and archaeologists,[21] but the Younger nowhere conveys this information explicitly in the text, and—accordingly—literary critics have not worked this possibility into their reading of the letter. However, in describing the agricultural conditions of his villa's farms, the Younger notes that, so heavy is the Tuscan soil, the

[18] See Morello and Gibson (forthcoming) for fuller documentation of both examples given here.

[19] Sherwin-White (1966) 317, 322–323.

[20] For such listing and itemization as part of the *Natural History*'s 'universal enterprise', see Beagon (2005) 30–32.

[21] It is perhaps now confirmed by the discovery, at the site of Pliny's villa near San Giustino in the upper Tiber valley, of *bolli* bearing the initials of the uncle (CPS) amongst the 150 examples bearing the initials of the nephew (CPCS); see further Uroz Sáez (2008), also Braconi-Uroz Sáez (2008).

fields must be ploughed nine times with the sturdiest oxen and ploughs before they can be sown (*Ep*. 5.6.10): an observation that finds an exact parallel in the central book of the *Natural History* (*HN* 18.181). Is this a covert hint to the reader that both Plinies make the same observation because each has owned the Tuscan villa in turn? It is true that we might ultimately prefer to think of this parallel as not so much an allusion as a reward lying in wait for readers of the Younger who know their text of the Elder well. But even so, this is significant in itself: the Younger will reward those who know the *Natural History* thoroughly with a key to unlocking a completely new reading of *Ep*. 5.6. Particularly intriguing in this regard is the Younger's assertion at *Ep*. 5.6.41 that the layout of his villa is either largely his own or he has finished what had been begun by others: *amo enim, quae maxima ex parte ipse incohaui aut incohata percolui*, 'for I love the layout which I have for the most part arranged or which I have developed from that put in train by others'. The Younger, so we might interpret, has effectively built his own villa on or over a site or buildings owned by the Elder, to a design which the Elder—tactfully not mentioned here—would have found not fit for his own purposes. A better metaphor for the Younger's relationship with the Elder could hardly be discovered. Not only could Pliny bear to read his uncle's monumental work, but he expected his own polite readership to do the same.

The Natural History *and the Elder's Literary Career*

From evidence that the Younger expected his readership to bring a knowledge of the *Natural History* to a reading of his own *Letters*, we move to another, and initially more puzzling, aspect of the early reception of the Elder's great work. In *Ep*. 3.5, the Younger provides Baebius Macer—certainly a Transpadane and perhaps (appropriately) a native of Comum[22]—with a chronological list of the Elder's works, plus a detailed account of the working habits of the Elder. Sorcha Carey has written powerfully of how the famous account of the Elder's obsessive studying, excerption, and note-taking here (*Ep*. 3.5.7–19) has influenced the way in which the *Natural History* has been read. As Carey argues (2003) 7 argues, 'With its description of a life scrupulously devoted to the compilation of knowledge, Pliny the Younger's letter has furnished modern readers with the ultimate justification for approaching the *Natural*

[22] See Birley (2000) 41, with further references.

History as the *Encyclopaedia Britannica* of the ancient world'. As a result, the Elder has often been detached from his own work and (until recently) his creativity as author somewhat effaced.[23] In this sense, *Ep*. 3.5 has proved the victor over *Ep*. 6.16 in terms of conditioning how the *Natural History* is understood.[24] Or, to put it another way, it is conceivable that we might read the *Natural History* differently if *Ep*. 3.5 had not survived, and we had only the Younger's account of the Elder's heroic death at Vesuvius in *Ep*. 6.16 and the passion for first hand scientific knowledge to which the letter apparently bears witness.

My own interest in the influence of *Ep*. 3.5 on the reception of the Elder's work focuses not on the Younger's account of his uncle's working practices, but rather on the complete list of the Elder's work which opens the letter (*Ep*. 3.5.3–6). Here the Younger Pliny fashions for the Elder a literary career which moves upwards through the prose genres, culminating in the *Natural History*. This list of the Elder's seven works is reproduced below in tabular form, along with the Younger's interspersed commentary and context:[25]

	TITLE	Translation	YOUNGER'S COMMENTS	Translation
1.	*De Iaculatione Equestri unus*	Throwing the Javelin from Horseback (one volume)	*hunc cum praefectus alae militaret, pari ingenio curaque composuit*	A work of industry and talent, written when he was a junior officer in the cavalry
2.	*De Vita Pomponi Secundi duo*	The Life of Pomponius Secundus (two volumes)	*a quo singulariter amatus hoc memoriae amici quasi debitum munus exsoluit.*	My uncle was greatly loved by him and felt he owed this homage to his friend's memory
3.	*Bellorum Germaniae uiginti*	The German Wars (twenty volumes)	*incohauit cum in Germania militaret, somnio monitus: astitit ei quiescenti Drusi Neronis effigies* …	He began this during his military service in Germany, as the result of a dream; in his sleep he saw standing over him the ghost of Drusus Nero …

[23] See Carey (2003) 6, 10, also Beagon (1992) 21, 23–24.

[24] Cf. Carey (2003) 5.

[25] For background to Pliny the Elder's career as it appears in this section of *Ep*. 3.5, see (all with references to earlier work) Syme (1969) = (1979) 742–773, (1991) 496–511, Healy (1999) 1–30, also Beagon (1992) 1–6, (2005) 1–5, Sherwin-White (1966) 219–221.

	TITLE	Translation	YOUNGER'S COMMENTS	Translation
4.	*Studiosi tres*	The Scholar (three volumes)	*quibus oratorem ab incunabulis instituit et perficit.*	... in which he trains the orator from his cradle and brings him to perfection
5.	*Dubii Sermonis octo*	Problems in Grammar (eight volumes)	*scripsit sub Nerone nouissimis annis, cum omne studiorum genus paulo liberius et erectius periculosum seruitus fecisset.*	... this he wrote during Nero's last years, when the slavery of the times made it dangerous to write anything at all independent or inspired
6.	*A fine Aufidi Bassi triginta unus*	A Continuation of the History of Aufidius Bassus (thirty-one volumes)	[NO COMMENT FROM YOUNGER]	
7.	*Naturae Historiarum triginta septem*	A Natural History (thirty-seven volumes)	*opus diffusum eruditum, nec minus uarium quam ipsa natura*	a learned and comprehensive work as full of variety as nature itself

As Henderson has noted in his monograph on Book 3, this list offers the reader a number of 'progressions' in the career and works of Pliny the Elder.[26] The most relevant one for present purposes is the gradual ascent through the literary genres from minor to major, from one volume to thirty-seven, culminating in full imperial history and—to top it all—'a learned and comprehensive work as full of variety as nature itself'.[27] This positioning of the *Natural History* at the end—in implicit culmination—of the Elder's career is the product of a deliberate choice on the Younger's part. For, as the Younger openly states in the second sentence of the letter, he has listed the works in the order in which they were written—rather than the order in which they were 'published' (*Ep.* 3.5.2):

[26] Henderson (2002a) 97–102. For the details of the various works mentioned and subjects covered, see Healy (1999) 31–35.

[27] The rise from a single volume on a minor technical topic to thirty-seven volumes on *natura ipsa* is impeded only in the middle of Pliny's career, where the Elder's rate of production drops to three volumes on *The Scholar* and eight volumes on *Problems in Grammar*. Yet, by way of apparent explanation at *Ep.* 3.5.5, the latter is said explicitly to have been written during times of danger and slavery under Nero; see further Gibson and Steel (2010).

> fungar indicis partibus, atque etiam quo sint ordine scripti notum tibi faciam; est enim haec quoque studiosis non iniucunda cognitio
>
> I shall perform the role of an index, and I shall also inform you of the order in which the works were written, for this too is knowledge which scholars are pleased to have.

If the works had been listed in order of dissemination, then, of course, the 'Continuation of the History of Aufidius Bassus' would have come in ultimate position, and the *Natural History* in penultimate (see below). The Younger's decision to catalogue the works in this particular way may seem innocent enough, until one realises that the resulting appearance of the *Natural History* in crowning position reverses the Elder's own relative weighting of his two final works. And this relative weighting is somehow related in the Elder's mind to order of publication, as is revealed in the prefatory epistle to the *Natural History* (*HN* pref. 18–20):

> dies uobis inpendimus, cum somno ualetudinem computamus, uel hoc solo praemio contenti, quod, dum ista, ut ait M. Varro, musinamur, pluribus horis uiuimus. profecto enim uita uigilia est.[28] ... uos quidem omnes, patrem, te fratremque, diximus opere iusto, temporum nostrorum historiam orsi a fine Aufidii. ubi sit ea, quaeres. iam pridem peracta sancitur et alioqui statutum erat heredi mandare, ne quid ambitioni dedisse uita iudicaretur.
>
> The days I devote to you and I reckon up the sleep I need consistent with keeping well. I am content with this reward alone, in that while—in Varro's words—I occupy myself with these trifles, I prolong my life by many hours. For assuredly to live is to be awake. ... I have written about all of you, about your father, your brother and yourself, in an appropriate work, *The History of Our Times*, which begins where the history of Aufidius Bassus leaves off. 'Where is this work?' you will ask. It was finished long since and is sacrosanct. I had resolved to entrust it to my heir so that no one might think my life was dedicated to ambition.

If this passage is placed together with the allusion to Catullus' 'trifles' which opens the prefatory epistle to the *Natural History* (quoted earlier), then it may be concluded, along with Howe (1985) 567, that '... by alluding to Catullus' *nugas*, Pliny is able to maintain a properly deferential attitude towards the *Natural History*, for it is his own *nugae* in size and

[28] On this trademark phrase and its function in the *Natural History*, see Beagon in this volume; cf. the tribute paid by the Younger to the Elder, perhaps with this memorable phrase in mind, at *Ep*. 3.5.8 *sed erat acre ingenium, incredibile studium, summa uigilantia*. Nevertheless, elsewhere in the *Letters*, the Elder appears remarkably sleepy. He is portrayed as a helpless dozer (*Ep*. 3.5.8), experiences dream-filled sleep (*Ep*. 3.5.4), and sleeps profoundly at a crucial moment during the eruption of Vesuvius (*Ep*. 6.16.13–14).

substance if compared to his unpublished *History of Our Times* ... It is also a 'trifle' because this other history would be a more fitting offering for a future emperor'.[29] A prefatory insistence that the writer's present work is second in rank and interest to another work in which the emperor is more directly praised is—as Tore Janson pointed out some decades ago—a Vergilian trope.[30] The Elder indeed, and characteristically, goes one better than the Vergil of *Georgics* 3 by having already written the work that will prove of more interest to the imperial family than the one currently on offer.

Nevertheless, where the Elder regards the *Natural History* (however ironically) as a trifle compared to the work reserved for posthumous publication, the Younger prefers a cataloguing principle which awards the Elder's *nugae* final (and crowning) position, and relegates the 'greater' work to penultimate position. Indeed the medium may be said to reflect the message here. For, as Henderson (2002a) 91 suggests of the Younger's epistle as a whole, 'With its "List of Publications" inset into moralized wonder and preachy anecdote, *Letters* 3.5 ... contrives to give a faint whiff of [the *Natural History*]'.[31] Furthermore, we may note that the 'Continuation of the History of Aufidius Bassus' languishes in second place without any glossing commentary from the Younger—the only work in the catalogue to receive this treatment.[32] And this takes place despite the very public declaration by the Elder in the passage quoted above that publication of the work of imperial history was entrusted to his heir. And young Caecilius Secundus, through the augmented name which adoption granted him—Plinius Caecilius Secundus—declared to the world that *he* was that heir and that *his* was the responsibility for ensuring its publication as the Elder's final (and greater) work.

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[29] On the problematic term *nugae* used in reference to the *HN*, see Morello in this volume.

[30] In the opening of the third *Georgic*, Vergil declares that 'his great work will be to sing of Octavian and his deeds .... In the meanwhile he will complete the work that Maecenas has requested' (Janson (1964) 75–76).

[31] It would be pleasing to argue additionally that with *fungar indicis partibus* (*Ep.* 3.5.2), the Younger performs for the benefit of Baebius Macer (and later readers) an indexing of the Elder's entire corpus parallel to the index which the Elder himself provides to the contents of his crowning work (and which forms Book 1 of the *Natural History*). However, the Elder does not himself call this section of the work an *index*, but prefers a circumlocution (*HN* pref. 33). But for an attempt to argue that Pliny's third book is itself a kind of tribute to the *Natural History*, see Henderson (2002a) 90–97.

[32] For comment, see Henderson (2002a) 100.

It is arguable that a more deferential attitude towards the Elder would have respected the Uncle's very public weighting of his two final works, and left the more 'important' imperial work in ultimate position. But, as we saw in the first section of this paper, the Younger does not always maintain such an attitude. So what are we to make of the heir's remarkable and public reversal? Or how would the Younger's ordering have played with contemporary readers? The catalogue clearly constructs a rise from great to small: from a single-book work on a minor subject to the longest of all his works, and one that is as varied as Nature herself. But what was the relative generic weighting of a work such as the *Natural History* and imperial history in contemporary Rome? Did imperial history outrank all other prose genres in dignity and authority, so that installing an educational-cum-encyclopedic work above it must have appeared as striking to contemporaries?[33] If the Younger's *Ep.* 3.5 has influenced the way that the *Natural History* has been read, could it also have bolstered the status of the *Natural History* among the Younger's contemporaries?[34]

Inevitably there are more questions than answers. A lazy answer would be to say that *Ep.* 3.5 invites us to see the Elder's sentiments for what they are: merely a conventional (and Vergilian) piece of deference that may be ignored by the Elder's heir in the interests of restoring to its true position the infinitely varied *Natural History*. More satisfactory is the observation that, given the Elder's clear statement that his work of imperial history contains laudatory accounts of the whole Flavian family—including Domitian—it would be entirely natural for the Younger, at a dramatic date in the early year's of Trajan's reign, both to remain silent over the content or significance of these thirty one volumes, and to demote them to penultimate position in his uncle's *oeuvre*. Indeed it is noticeable that the Elder's report of the title of the work (*temporum nostrorum historiam orsi a fine Aufidii*, '*The History of Our Times*, which begins where the history of Aufidius Bassus leaves off') is reduced by the Younger to *a fine Aufidi Bassi [triginta unus]*, 'a Continuation of Aufidius Bassus [thirty-one volumes]'. The phrase *tempora nostra* is clearly unattractive where

[33] For the relationship of the work to the encyclopaedic and *mirabilia* tradition (without itself belonging quite to either), see Beagon (1992) 8–17, also Beagon and Naas in this volume.

[34] This is quite different, of course, from suggesting that the Younger's letter *ensured* the survival of the *Natural History* (at the expense of the imperial histories). For the great (and independent) popularity of the *Natural History* from antiquity into the middle ages see Beagon (1992) 22 ff., and for the uncertainty of the Younger's own reputation in some periods of late antiquity see Cameron (1965), (1967).

the phrase 'our [times]' includes Domitian within its ambit (*uos quidem omnes, patrem, te fratremque*, 'all of you, your father, your brother and yourself').

But even an answer such as this does not appear entirely to exhaust the possibilities. We could suggest, as I have attempted to do elsewhere,[35] that the Younger is consciously attempting to fit the Elder into the model of the 'Vergilian' literary career. Just as Vergil rose from pastoral to epic through increasingly prestigious genres and lengthier works—in a way that, as Farrell has argued, contemporaries began increasingly to see as parallel to the rise through the offices of the traditional political *cursus honorum*[36]—it may be that the Younger has consciously attempted to mould the Elder's career along these same lines. As Bruére (1956) has argued, the Elder certainly saw the *Natural History* as a work to rival the *Aeneid* (and the *Georgics*) as *the* national work for Rome. Might then the award of crowning position to the *Natural History* be the Younger's rich and subtle tribute to the Vergilian aspirations of the Elder?

It might be observed that a work which the Younger characterizes as *diffusum*, *eruditum*, 'learned and comprehensive' and (most significantly) *nec minus uarium quam ipsa natura*, 'as full of variety as nature itself' appears with perfect appropriateness—in a way that the historical work could not—at the end of a literary career which has been characterized above all by *uariatio* in subject-matter, generic range, and style.[37] And here the reader of letter 3.5 may be invited to remember the Younger's own literary career too, which likewise ranges freely over speeches before emperor, senate and courtroom, taking in a wide range of poetry and the possibility of history, not to mention the *Letters* themselves. Furthermore the *Letters*, programmed through their deliberately open-ended nature (*Ep.* 1.1.2 *ita enim fiet, ut eas* [sc. *epistulas*] *quae adhuc neglectae iacent requiram et si quas addidero non supprimam*, 'On that assumption I shall seek out those [letters] still lying neglected, and I shall not expunge any which I intend to add to the collection in future') so as to be capable at any moment of standing as the Younger's own final work, themselves convey—although on a miniature scale compared to the *Natural*

35 See Gibson and Steel (2010).

36 Farrell (2002).

37 Given that the Elder's earlier work on the German wars and his later work of imperial history appear to 'dovetail' both in time and in subject-matter, it would arguably also have been rhetorically less convincing for the Younger to place the latter work in final and crowning position.

History—a whiff of 'infinite variety' both in terms of the very great range of subject-matter covered and the artistic *uariatio* of their arrangement.

However, one further explanation for the *Natural History*'s crowning place in *Ep.* 3.5—and dislodging of the *History of Our Times* in a clear reversal of the Elder's own express weighting of the two works—which I wish to offer here, looks at the influencing factor of the Elder's death at Vesuvius and the Younger's own later Vesuvius letters in Book 6. The *Natural History* must occupy final position in the Elder's literary career because of the marriage of the life and the works at Vesuvius and—later—the narration of this consummation by the Younger in *Ep.* 6.16. In addressing the Vesuvius letters to Rome's leading political-military historian, Cornelius Tacitus, the Younger had a golden opportunity to place some emphasis on the *History of Our Times* as the work which the Elder had left behind for his heir to publish in the event of his death. Who better than Tacitus to hear a narration of the circumstances of Pliny's death, but with emphasis placed on the appropriateness of this death for an imperial historian who died in imperial service? Here we might have heard of a man who died whilst performing his duty for his particular patron Titus (so very recently elevated to the purple), deliberately leaving behind a posthumous work—greater than the *Natural History* (as advertised already in the preface to that work)—which praised Titus and his father Vespasian.

Instead, the Younger casts the emphasis of the letter quite differently. And this we must regard as a conscious artistic choice. Some reasons for this choice are perhaps clear. The most notable thing about Pliny's death is not the passing of a dutiful imperial servant *per se*, but the fact that it took place during a tremendous natural disaster. According to the Younger in the opening lines of *Ep.* 6.16, this fact alone would serve to make Pliny virtually immortal, even without the intervention of Tacitus (*Ep.* 6.16.2):

> quamuis enim pulcherrimarum clade terrarum, ut populi ut urbes memorabili casu, quasi semper uicturus occiderit ...
>
> It is true that he died in a disaster which overtook the most beautiful of regions, and in a calamity shared by communities and cities, so that his renown will seemingly live forever ...

As such, we might guess, the circumstances of the death of the Elder in a famous natural disaster have acted as a strong determining factor in the placement of the *Natural History*—itself devoted to the natural world and man's place in it—as the crowning work of the Elder's literary career. And, fittingly, in *Ep.* 6.16 the Elder goes to his death as a scientist and natural

historian, rather than as a political historian. When the Vesuvian cloud appears, Pliny's scholarly interest is awakened immediately (*Ep.* 6.16.7):

> magnum propiusque noscendum ut eruditissimo uiro uisum. iubet liburnicam aptari; mihi si uenire una uellem facit copiam; respondi studere me malle, et forte ipse quod scriberem dederat.
>
> My uncle, most learned man that he was, realized that this was important, and should be investigated at closer quarters. He ordered a fast-sailing ship to be made ready, and gave me the option of accompanying him if I so wished. I replied that I preferred to work at my books, and it chanced that he had given me an exercise to write.

The Elder is here praised with the very same adjective (*eruditissimo uiro*, 'most learned man') which had been used to laud the *Natural History* in *Ep.* 3.5.6 *opus diffusum eruditum*, 'learned and comprehensive'. The basic research work of the political historian is effectively left behind with the Younger Pliny, whose assigned task here, as we later learn, is to make excerptions from Livy (*Ep.* 6.20.5). Furthermore, as the Elder crosses the bay of Naples on his scientific-cum-rescue mission (*Ep.* 6.16.9 *quod studioso animo incohauerat obit maximo*, 'the journey which had begun in a spirit of research he now undertook with the greatest urgency'), he effectively continues with a kind of basic research related to the *Natural History*, giving orders for his observations of the eruption to be recorded in his ever-present notebooks (*Ep.* 6.16.10):

> … rectumque cursum recta gubernacula in periculum tenet adeo solutus metu, ut omnes illius mali motus omnes figuras ut deprenderat oculis dictaret enotaretque.
>
> … he maintained a straight course, steering straight towards the danger. He was so fearless that he dictated and had notes taken of all the movements ands shapes of that evil phenomenon as he observe them.

And so the Elder goes to his death effectively supplementing the *Natural History* (which indeed contains a short section on volcanoes).[38] A fitting end for one whose crowning work—in the eyes of his nephew—was this work rather than the work of imperial history. Indeed, *Ep.* 6.16 cements the *Natural History*'s place as final and pre-eminent work in *Ep.* 3.5. The author of a *magnum opus* on nature dies making notes on one of her greatest ever disasters.

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[38] Volcanoes occur briefly towards the end of Book 2 (*HN* 2.236–238) in the middle of a larger discussion of naturally occurring fire or inflammable materials. However, for the *HN* as more of a product of literary tradition than directly observed experience, see Ash in this volume.

The same connection between Vesuvius and the *Natural History* may conceivably have been felt by Suetonius in his entry on the Elder in his *De Viris Illustribus*. Both text and ascription of the extant brief *uita Plinii* are, admittedly, somewhat controversial.[39] Nevertheless, if the text reflects a Suetonian original, then that original will have been included in the lost 'historians' section of the *De Viris Illustribus*. In its transmitted form the *uita* mentions but two works: the early work on the German wars and the *Natural History*. No mention is made of the *History of Our Times*, and the *Natural History* is made to appear immediately before the narration of the great man's death at Vesuvius:[40]

> itaque bella omnia quae unquam cum Germanis gesta sunt .xxxuiii. uoluminibus comprehendit; itemque naturalis historiae xxxuii libros absoluit. Periit clade Campaniae …
>
> So it came about that he compiled an account in 38 books of all wars ever fought against the Germans and also completed 37 books of natural history. He met his end in the Campanian disaster …

Of course, the *uita Plinii* may well have suffered abridgement in the complex process of transmission, both in overall terms and within this particular extract. Nevertheless, if the basic emphasis of the text can be trusted here, we may even detect the influence on Suetonius (or on a later writer) of Pliny the Younger. For the *Natural History* is the final work to be mentioned, and is placed immediately before notice of the Elder's death in the natural disaster which afflicted Campania. Perhaps other contemporary and later readers too felt the urge to connect the circumstances of the Elder's death with his longest (and subsequently most famous) work.[41]

In conclusion, the younger Pliny is emphatically not one who wilted at the thought of making his way through 'his uncle's immense and inelegant book'. Rather, in apparent 'defiance' of the Elder's explicit estimation of the relative weighting of his own last works, the Younger moves the *Natural History* to the head of the class and awards it final and crowning position within his uncle's *oeuvre*. Furthermore, the Younger engages

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[39] See Reeve in this volume. For a discussion of the *De Viris Illustribus*, see Baldwin (1983) 379–466, esp. 399–405 on the *Life* of Pliny the Elder; also Wallace-Hadrill (1983) 50–59, and Power (2010).

[40] The text and translation are those of Reeve in this volume.

[41] Cf. also the preface to the *Noctes Atticae* of Aulus Gellius.

with the *Natural History* within the body of the *Letters* in such a way as to suggest that he expected from his readers a knowledge of the work's contents, techniques, and even minutiae.[42]

[42] Thanks are owed for comments and suggestions to Mary Beagon, John Henderson, and Tristan Power, and to members of the audience at the conference in Manchester in June 2006.

CHAPTER TWELVE

THE *VITA PLINII*

Michael Reeve

From the *editio princeps* (Venice 1469) until well into the 16th century, editions of Pliny's *Natural history* opened with a life of the author ascribed to Suetonius. The earliest that lacks it is the Venice edition of 1507; the latest I have seen that has it is the Paris edition of 1543, which in all three versions puts it on the back of the title page.[1] Misled by its absence from editions that he had consulted, Elias Vinetus thought he had discovered a new text when an acquaintance sent him a copy of it:

> Est Tolosae in vetusta Petri Fuxensis cardinalis bibliotheca antiquum Naturalis historiae Plinii exemplar, in quo hoc scriptorum Suetonii Tranquilli frustulum cum nuper invenisset Arnoldus ille Ferronus consiliarius regius … describendum id et … mittendum statim nobis Burdigalam suam curavit.
>
> At Toulouse in the old library of cardinal Pierre de Foix there is an ancient copy of Pliny's *Natural history*. Recently, when Arnold Ferron—you know, adviser to the king—found in it this chunk of Suetonius Tranquillus's writings, he had it transcribed and sent at once to me in Bordeaux, his home town.

Accordingly, he published it in *Suetonii Tranquilli de illustribus grammaticis et rhetoribus libri duo* (Poitiers 1556). Later, on meeting it in an edition of Pliny older than himself, he confessed his mistake.[2] He has had his revenge, however, on editors of Pliny, who have taken their information about the *codex Fuxensis* from Dalecampius (1587) without noticing that Vinetus had already drawn on it.

Since Vinetus, it is editors of Suetonius who have assumed responsibility for the *Vita*. They assign it to a work *De viris illustribus* attested not only in the title of the *Vita* but also by Jerome, whose survey of Christian writers, his own *De viris illustribus*, opens as follows:[3]

[1] The three versions are listed by Nauert (1980) 388. I have not seen the first, but he says that only the title page differs.

[2] See his later edition of Suetonius (Lyon 1576) 685–686 or Casaubon (1595), 'Grammatici et rhetores' p. 32.

[3] Ceresa-Gastaldo (1988) 56. See also *Ep*. 47.3.2 in Hilberg (1910) 346: *Scripsi librum*

> Hortaris, Dexter, ut Tranquillum sequens ecclesiasticos scriptores in ordinem digeram et quod ille in enumerandis gentilium litterarum viris fecit illustribus ego in nostris faciam.
>
> You urge me, Dexter, to follow in the footsteps of Tranquillus by surveying ecclesiastical writers and drawing up for our eminent literary figures the roll call that he drew up for secular literature.

Suidas too records that Tranquillus composed a work on eminent Romans.[4] The survival of a work *De grammaticis et rhetoribus* attributed to Suetonius has suggested that he divided his eminent writers and scholars generically, and lives of the poets Terence and Horace are attested; so too are a passage on the origin of poetry and a mention of the imperial rhetorician Isaeus.[5] Editors have assembled almost all the unattributed biographical fragments from two sources: Jerome's *Chronicle*, which includes many short notices of literary figures;[6] and biographies of writers found in manuscripts of their works or of commentaries on them. All biographies in the latter class except the *Vita Plinii* are of poets: besides Terence and Horace, extant biographies of Virgil, Tibullus, and Lucan, have been assigned with varying degrees of probability, and varying qualifications about reworking, to the section of *De viris illustribus* that dealt with poets.[7] The *Vita Plinii*, one of just six fragments in either class that concern historians, is the only fragment explicitly attributed to *De viris illustribus*—and the only biographical fragment of the work not edited since Roth (1858) and Reifferscheid (1860).[8]

As both Roth and Reifferscheid knew of several manuscripts that introduced the *Vita* with the title *Vita Plinii ex catalogo virorum illustrium Tranquilli*, they treated the ascription as securely transmitted.[9] Whether

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de illustribus viris ab apostolis usque ad nostram aetatem imitatus Tranquillum Graecumque Apollonium.

4 Adler (1935) 581.18–27.

5 This last occurs in the scholion on Juvenal 3.74 published by Valla (1486), *Isaeus rhetor fuit Atheniensis ut Probus inquit illius temporis, cuius et Tranquilus meminit, alter Isocratis ut ferunt discipulus praeceptorque Demosthenis, ut quidam sentiunt Atheniensis, ut alii Chalcideus; sed Isaeum dixisse hunc credi par est de quo Plinius in epistolis* [2.3.1–3] '*Magna Isaeum fama praecesserat* ... *docet delectat afficit*'; but about *cuius et Tranquilus meminit* doubts are expressed by Townend (1972) 377–378, 386.

6 Fotheringham (1923).

7 On the place of *De viris illustribus* in a still larger work, the *Pratum*, see Schmidt (1991) 3806 n. 52, 3815, and (1997) 224–225.

8 Rolfe (1914) 504 and Beaujeu and Ernout (1950) 13 took their text from Reifferscheid.

9 Accordingly, Rolfe (1914) 392 described it as 'attributed to Suetonius in the manuscripts which contain it'.

the *Vita* did go back to Suetonius, however, had been controversial since J.J. Scaliger put it later than Jerome,[10] and Roth, who answered Scaliger's argument, saw that even without the tailpiece about 'these books' (the 37 books of the *Natural history*) it could hardly be Suetonius's *Vita* in its original form.[11] Furthermore, there is no other evidence, or at least no direct or explicit evidence, that he wrote a life of the Elder Pliny. One might suppose, however, that the work the Younger Pliny in *Ep.* 5.10 pressed him to release was *De viris illustribus* and that he applied the pressure because he particularly wanted to see in circulation a life of the Elder Pliny.[12] One might also take Suetonius to be the source for *historicus* in the thin and muddled entry that Jerome's *Chronicle* includes under the twelfth year of Trajan (AD 109): *Plinius Secundus Novocomensis orator et historicus insignis habetur, cuius plurima ingenii opera extant*, where *orator* most naturally means the author of the *Panegyricus* and *historicus* the Elder Pliny.[13] Apart from the *Vita* and this passage of Jerome, the only extant references to the Elder Pliny's historical works occur in the Younger Pliny's letters (3.5.4–6 and 5.8.5), the *Annals* of Tacitus (1.69.2 and less explicitly 13.20.2), and the letters of Symmachus (4.18.6);[14] but if Jerome had read the Younger Pliny's letters, he would hardly have conflated the two Plinies.[15] It has been suggested that he did not conflate them but knew only of the Younger and perhaps only from extracts: 'la dipendenza da Plinio il Vecchio, se ci fu, sarà stata ancora piú

[10] Scaliger (1606) 'Animadversiones' 190, MMCXXV, 'Suetonio perperam attribuitur, quum sit sequioris aevi, plusquam quatuor saeculis post Suetonii obitum scripta'; see also Casaubon (1610) 'Animadversiones' 230. Shortly before the editions of Roth and Reifferscheid, Regent (1856) 42–43 had surveyed the debate.

[11] See also Burman (1736) II.409–410 ('In stilo nihil video quod dedeceat Suetonium, sed esse compendium ex maiori scripto contractum credo'), Reifferscheid (1860) 407, Baldwin (1983) 400–405. On the tailpiece Franciscus Puccius in a copy of the ed. Ven. '1497' that he gave to Antonius Seripandus, Naples Naz. S.Q. XVI J 12, writes 'puto non esse Suetoni'. More below on part of it.

[12] For the possibility that it was *De viris illustribus* see Macé (1900) 66–68; Sherwin-White (1966) 337–338 needlessly and implausibly inferred from Pliny's hendecasyllabic trailer for it that it was a volume of poems. The other part of the surmise I owe to Roy Gibson.

[13] So Roth (1858) lxxxix, Reifferscheid (1860) 364–367, Helm (1929) 87–88. For the text see Fotheringham (1923) 277.21–23.

[14] Gundel (1951) 285–294.

[15] Roth (1858) lxxxviii n. 83; the point goes back at least as far as Benedictus Jovius, Vat. Lat. 5896 f. 20v = Ambros. I 47 inf. f. 60v. Macé (1900) 70–71 plausibly suggested that Jerome conflated the two Plinies because he found in Suetonius's *De viris illustribus* a life only of the Elder; as he and Jovius point out, an earlier victim of the confusion was Serenus Sammonicus (Macrob. *Sat.* 3.16.6–8).

generica e forse il *Plinius Secundus Novocomensis historicus* sarà disceso assai piú semplicemente dalla conoscenza dell'*intitulatio* dei manoscritti della *naturalis historia*'.[16] Would that not have been conflation? Moreover, the same scholar had just quoted Jerome's summary of Book 37, and I am not aware of any manuscript earlier than the late 14th century that has either *Novocomensis* or *historicus* in its title for the work.

That the ascription of the *Vita* to Suetonius is not in fact securely transmitted has emerged only in the last 25 years.[17] Among the older manuscripts, only E (Paris B.N. Lat. 6795, s. ix^2) has kept its first leaf, and the beginning of the *Vita* is present on f. 1v; but no title is visible above it. True, the leaf is in poor condition and has been glued to a modern leaf; but even if E once had a title either at the top of f. 1v, where there is an apparently blank line before the faded *N* of the opening words, *Novem menses*, or on f. 1r, which one hopes would not have been glued down if anything had been written on it, no mention of Suetonius passed to descendants of E. Instead of a title for the *Vita* its copy e (Paris B.N. Lat. 6796A, s. xii) has a title suited to what follows it, *Incipit prefatio in libro Plinii Secundi de naturis rerum*; the phrase *de naturis rerum* was one of Hermann Walter's reasons for linking E with Cluny, where a cataloguer in the 11th century recorded *Volumen in quo continetur Plinius de physica, idem de naturis rerum*.[18] Besides e and its descendant Escorial V I 14 (s. xiii / xiv),[19] E has many descendants on another branch, the most prolific branch of the medieval tradition. Those closest to E, six in number, break off at one or other of two points where E has lost leaves, 32.149 or 31.49. Only two of the six preserve the *Vita*, namely Berlin Hamilton 517 (s. xi^2) and Luxemburg Lat. 138 (s. xii^2); neither has a title. A relative of E, namely a (Vienna 9–10, s. xii), also has no title, though the leonine hexameters written in the frontispiece describe the content of the work as *naturas rerum*. I shall demonstrate elsewhere that up to Book 13 E and a descend from a lost copy of Pierpont Morgan M 871 (s. ix^1), which has lost its opening leaves, and that this manuscript descends in turn from another that has lost them too, D (Vat. Lat. 3861, s. viii / ix); where both these manuscripts are available, Pierpont Morgan M 871 has a few corrections taken from an independent source and absent from D, but I

[16] Brugnoli (1995) 64 nos. 195a and 195c, 174–176.

[17] Munk Olsen (1982–1985) II.243–273, Borst (1995) 209, 235–236, 260, 280.

[18] Reeve (2007) 177. Hermann Walter has very kindly sent me the relevant section of his *Habilitationsschrift* (pp. 117–124).

[19] Reeve (2006) 161–164.

have found no evidence of further such correction in the lost copy of it that gave rise to E and a. Related to E and a in Books 14–37 is a family that includes Prague Univ. 2425 (s. xiv/xv) and Laur. Edili 165 (a. 1433, Basel); whether the relationship holds anywhere in the earlier books is yet to be determined,[20] but in any event Edili 165 has no title, Prague Univ. 2425 *Incipit prologus circa libros Plinii Secundi*. The opening of the work is also preserved in q (Paris B.N. Lat. 7701, s. xii) and in a small family whose oldest member, probably its head, is d (Paris B.N. Lat. 6797, s. xii); but q has no title, d only *Argumentum sequentis operis*.

The title known to Roth and Reifferscheid, *Vita Plinii ex catalogo virorum illustrium Tranquilli*, reached the earliest editions from a family of manuscripts that I have recently defined for the first time, even though it has four continuous members as old as the 12th century: Leiden Voss. Lat. F 1, British Library Arundel 98 (this, perhaps the first of two volumes, runs to the end of Book 18), Le Mans 263, Naples Naz. V A 1.[21] Arundel 98 differs from the rest in having *Plini Secundi* for *Plinii*. Another member of the family is the epitome that Robert of Cricklade dedicated to Henry II.[22] The family descends from a supplemented descendant of Hamilton 517. Did the supplements include the title of the *Vita*, or did someone introduce it by conjecture? I cannot yet answer the question, but Suetonius's authorship could perhaps have been surmised from the opening of Jerome's work *De viris illustribus*, quoted above, where indeed he is called simply Tranquillus.[23]

Be that as it may, I offer here a new edition designed both to present the evidence for the text and to illustrate the development of the tradition. Beyond the best version that can be elicited from the manuscripts I venture no reconstruction, because it is not clear what one might be

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[20] My account of Edili 165 in Reeve (2007) 142–144 was unsatisfactory, and I shall come back to it on another occasion. Prague Univ. 2425 is very close to it throughout the work, and I have recently identified their source, a 12th-century German manuscript now reduced to five damaged leaves. I suspect that Prague Univ. 2425 was written at much the same time as Edili 165. Because of the silences and inaccuracies in the apparatus of the Teubner and Budé editions, it is not just these two manuscripts that will have to be collated for their position in the stemma to emerge; and their main source up to Book 13 may anyway have omitted or lost the *Vita*.

[21] Reeve (2007) 152–155.

[22] Näf (2002); see Reeve (2007) 134–135. Borst (1995) 260, 280, treats the epitome as the earliest place where the attribution to Suetonius occurs, but none of the four manuscripts listed above has been precisely dated.

[23] 'Hieronymi … auctoritate,' says Reifferscheid (1860) 'cuius liber a novis semper scriptoribus imitando continuandoque exprimeretur, propagabatur memoria Suetoniani scripti, ut per medium usque aevum duraret'.

trying to reconstruct. Besides d and q, I cite E where possible and its descendants e and Hamilton 517, which I call h;[24] its relative a; Prague Univ. 2425, which I call b;[25] and two of the oldest witnesses to the Suetonian title, l (Arundel 98) and c (Le Mans 263).[26] I add two later versions of uncertain authority: Gel., which Gelenius or his printer Frobenius put on the back of the title page with no heading in a reprint (1539) of their third edition (Basel 1535),[27] and Mar., which in 1613 or thereabouts Petrus Pithoeus Luyerius, nephew of the best-known Petrus Pithoeus, copied out under the heading *Ex catalogo virorum illustrium Tranquilli* from an 'old' manuscript once at Marmoutier (near Tours).[28] Gel. and Mar. share a variant unlikely to be coincidental, *summam* for *consummationem* at the end, and their figure for the books on German wars proves them at least partly independent of the text often reprinted after it appeared in the second edition (Rome 1470); but contamination with that text is hard to rule out, because even Mar., for all its semblance of being a straight transcript from the 'old' manuscript, could be the result of collation on a printed edition. Incidentally, Gel. put *liburnica pertendisset* into print 200 years before the elder Burman conjectured it.[29] I give a translation first rather than disrupt my other remarks on the text.

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[24] The symbol h has more often been used in Books 33–37 for Paris B.N. Lat. 6801, but Desanges (1980) uses it for Ham. 517.

[25] The symbol b has been used for a manuscript cited only in Book 32, Vat. Lat. 1954.

[26] Some 15th-century manuscripts contain the *Vita* without going further into the *Natural history*: Munich C.L.M. 14053 f. 174v, Rome Naz. Sess. 286/1. The excerpts in Modena Est. Camp. App. 1372 (γ T 1 10) begin with it. These copies offer nothing unusual for their date.

[27] It replaced Frobenius's remarks about his collaboration with another printer.

[28] Mar. appears on a flyleaf at the front of Bodl. Auct. S 3 21 (Basel 1530), where it is said to be found 'In V.C. Mareschalti sive maioris monasterii'; on a flyleaf at the back is a list of witnesses used by Nic. Clericus, which includes 'Turonicum sive Maioris monasterii exemplar habet Fr. Mareschallus Boimoneus nunc Foulle creditor habet'. Doubtless Pithoeus knew the manuscript only through Clericus. I have not yet identified either Clericus or Mareschallus. For Book 1 the manuscript had the same title as d, *Incipit liber primus naturalis historiae Plinii Secundi Novocomensis oratoris continens tantum capitula cum auctoritatibus ceterorum xxxvi sequentium librorum*, except that d has *Novecom-* and *auctoribus*.

[29] After contributing anonymously to the first edition printed by Frobenius (Erasmus's, 1525) and receiving an acknowledgement in the second (1530), Gelenius published *Annotationes* in the third (1535), where he says in his preface that he has collated throughout, not just *prout ad singulos scrupulos res poscere videbatur*, two *pervetusta exemplaria . . . , alterum longe integerrimum, depravatius alterum, ita tamen ut sincerioris lectionis manifesta etiam nunc vestigia retineat*. On his editions see Allen (1926) 16–17, 330, and Nauert (1980) 386–390; Nauert reproduces his preface, an important document

Plinius Secundus of Novum Comum, after conscientious military service at equestrian level, also conducted himself unimpeachably in a succession of eminent administrative posts. At the same time, he gave so much attention to cultural pursuits that hardly anyone can have written more off duty. So it came about that he compiled an account in 38 books of all wars ever fought against the Germans and also completed 37 books of natural history. He met his end in the Campanian disaster: he was in charge of the fleet at Misenum and when Vesuvius erupted headed there in a galley to carry out a closer investigation of the causes, but when contrary winds prevented him from returning he succumbed to the quantity of dust and ash, or as some believe was dispatched by one of his slaves whom he had begged when the heat overwhelmed him to expedite his death. In these books he included 20,000 notable things from his reading of some 2000 volumes; the first book, which serves as an index to the 36 that follow, contains a summary of the whole work and a specification of its chapters.

Plinius Secundus Novecomensis, equestribus militiis industrie functus, procurationes quoque splendidissimas atque continuas summa integritate administravit, et tamen liberalibus studiis tantam operam dedit ut non temere quis plura in otio scripserit. Itaque bella omnia quae unquam cum Germanis gesta sunt .xxxviii. voluminibus comprehendit; item naturalis historiae .xxxvii. libros absolvit. Periit clade Campaniae; nam cum Misenensi classi praeesset et flagrante Vesuvio ad explorandas propius causas liburnica pertendisset neque adversantibus ventis remeare posset, vi pulveris ac favillae oppressus est, vel ut quidam existimant a servo suo occisus quem deficiens aestu ut necem sibi maturaret oraverat. Hic in his libris .xx. milia rerum dignarum ex lectione voluminum circiter duum milium complexus est; primus autem liber quasi index .xxxvi. librorum sequentium consummationem totius operis et species continet titulorum.

Plinius Secundus *dhlcb*: C. Plinius Secundus *q, Gel.*: C. Plinius *Mar.: om. Eea*

novecomensis *qd*: novem menses *Eehlca*: novicomensis *b*: novocomensis *recc. multi, Gel., Mar., quae forma apud Cic. Fam. 13.35.1 et in chronicis inde ab Hieronymo invenitur: improbavit Oudendorpius in ed. (Leid. 1751) 997, delevit Wolfius in ed. (Lips. 1802) III 56*

et tam *E(?)e*

omitteret *pro* temere *b*

quis *lc, Gel., Mar.*: quo *qdEehb*: quam *a*

Namque *Mar.*

germanis *qdEehlab, Gel., Mar.*: romanis *c*

xxxviii *qdehlab, Gel., Mar.* (octo et triginta): xxxvii *c*: xx *ed. Rom. 1470 ex Plinii iunioris Ep. 3.5.4*

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in the history of editing. The *Vita* reappeared in a reprint (Paris 1543) but not in later Basel editions (1545, 1549, 1554/55), where it gave way to undated remarks by Gelenius on his latest improvements to the text.

septem et XXX *Mar.*
absolvit *qdlc, Gel., Mar.*: obvolvit *Eehab*
clade *b, Gel., Mar.*: grades *cett., sed* ra *in ras. d*: gades *recc.*: Stabiis *Vinetus ex Plinii iunioris Ep. 6.16.12, iam Valdus († 1527) in Vat. Inc. II 145,*[30] *qui etiam* Bais
classimpes set *e*
vesuvio *d, Gel.* (Vesuio), *Mar.* (Vaesuvio): vesuvio + *lac. q*: verrio vel vesubio *ehla*: verrio *b*: vesubio *c*
pias causas *q*
liburnica *qdab, Gel., Mar.*: liburnicas *ehlc*
pertendisset *qdb, Gel., Mar.*: praetendisset *ehalc*
neve *q*
atque favillae *Mar.*
occisus ⟨est⟩ *a*
oraverat *dqEeab, Gel., Mar.*: oraverit *hlc*
[his] *a, Mar.*
dignarum ⟨cura⟩ *Valdus (sic Plin. Praef. 17)*
duum milium *d*: dum milium *q*: duorum milium *ehl*^{1}: duo milium *c*: duo milia *abl*^{2}: MM *Gel., Mar.*
[autem] *E*^{1} *l*
[liber] *q in lac.*
index *dlc, Gel., Mar.*: inde *qeh*: index est *ab*
xl.vi *e (?)*
librorum *dlc, Gel., Mar.*: in librorum *q*: in libro *e(?)*: in libros *hab*
consummationis *q*^{1}: summam *Gel., Mar.*
continetur *b*

Another reading that perhaps deserves mention appears in the text of Paris B.N. Lat. 6803 (s. xiii^2), a descendant of E through Voss. Lat. F 1: instead of *novem menses*, which Voss. Lat. F 1 inherited from E, it has *novem quo menses*, nonsense that no-one starting from *novem menses* would ever have conjectured. It looks like an earlier stage of the corruption that turned *novecomensis* into *novem menses*; but if so, it entered the manuscript by contamination from a source that has left no other trace. More likely *quo* was a misguided attempt at making a word out of *co*. Paris B.N. Lat. 6802 (s. xiii^2) has the even stranger reading *nove tercom mensis*, with the *er* and *m* of *tercom* in suspension; and I cannot devise a better explanation for *ter* than that it is a garbled form of a common abbreviation for *vel*. The two manuscripts, probably both written in Paris at much the same time but neither copied from the other, descend from a descendant of Voss. Lat. F 1 that had received at least one

[30] On this volume see Reeve (2007) 160 n. 114. I have more to say about it, but this is not the place.

variant in the Preface from d or a descendant,[31] and d has *novecomensis*. Presumably, therefore, someone transferred this variant too, but in a confusing way.

Where readings that I have adopted in the text differ from those of E, the question arises whether they could be medieval conjectures: *Plinius Secundus*, *Nove-/Novicomensis*, *et tamen*, *quis*, *absolvit*, *clade*, *Vesuvio*, *liburnica pertendisset*, *index*, *librorum*. If so, the hardest to achieve would have been *clade*, with or without the aid of the Younger Pliny's words in his letter to Tacitus about his uncle, *Quamvis … pulcherrimarum clade terrarum … quasi semper victurus occiderit …* (*Ep.* 6.16.2). It did not originate in b or Edili 165 if the corrector who substituted it for *grades* in a relative of d, namely L (Laur. 82.1–2, s. xii/xiii), is the one who soon after it was written added variants from an ancestor or relative of b and Edili 165;[32] when Hermolaus Barbarus accepted *clade*,[33] he probably knew it indirectly from L, much copied and collated after it reached Italy in the 1430s. That *quis* for *quo* is right, whether a conjecture or not, three passages of Suetonius prove: *Vesp.* 15.1 *Non temere quis punitus insons reperietur nisi absente eo et ignaro aut certe invito atque decepto*, *Titus* 6.2 *ad praesens plurimum contraxit invidiae, ut non temere quis tam adverso rumore magisque invitis omnibus transierit ad principatum*, *Gramm.* 4.3 *non temere quem litteratum in titulo sed litteratorem inscribi solitum esse*. In all three he uses *non temere quis* for *vix aliquis*, or *non temere* as 'i. q. *non facile*, nostr. *nicht leicht*', 'a slightly less vigorous alternative to *non*';[34] without any form of *quis* the use also occurs at *Aug.* 16.3, 53.2, 66.1, 73, 77, *Tib.* 73.1, *Cal.* 30.1, 36.1, *Claud.* 33.1, 36.1, *Nero* 15.1, *Titus* 8.3, *Dom.* 19, 21, *Rhet.* 25.6. Indeed, it is such a trademark of his style as to establish that a work of his lies behind the *Vita Plinii*. Indicative too is *pertendere*. 'Legitur fere singulis vel binis locis' says *TLL* 'apud TER., CIC., VARRONEM, BELL. Alex., PROP., LIV., SEN. Nat., QVINT., FRONTIN., al., aliquanto saepius apud SVET., RVFIN., AVG.'; but in fact

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31 Reeve (2007) 128. On 6802, which Petrarch bought at Mantua in 1350, see also 133 n. 55.

32 Reeve (2007) 144–147. Many variants, among them some in the *Vita*, were added to d in the 14th century from a relative of c, but the correction that produced *grades* antedates its descendant T (Madrid Nac. 10042, s. xiii).

33 Barbarus (1492) f. a3r = Pozzi (1973) 5, though Pozzi miswrites *clade* as *clades*. Barbarus also considered *Gaudis*, apparently on the evidence of a corrupt reading in Symmachus *Ep.* 1.1.

34 Baumgarten-Crusius (1818) 763; Kaster (1995) 290–291, though oddly he renders it at *Gramm.* 4.3 as 'not … carelessly'.

Cicero does not use it at all, and in the sense 'proceed', of motion, it appears only at *Bell. Alex.* 30.1, Livy 5.8.12, and Frontinus *Strat.* 1.4.6, before Suetonius *Jul.* 4.2, 32, *Tib.* 72.2, *Cal.* 44.2.[35]

I have mentioned the survival of material from *De viris illustribus* in the textual traditions of authors concerned. Though there are no witnesses older than the 9th century to the biographies of Lucan or Horace,[36] and the 14th to the biography of Tibullus,[37] it seems more probable that they entered each tradition in late Antiquity, when Donatus and his pupil Jerome certainly used *De viris illustribus*, than in the Carolingian revival or later, when it is not known to have been available. The same will be true of the *Vita Plinii*.[38]

Certainly Vincent of Beauvais did not take the *Vita* direct from *De viris illustribus*. In his *Speculum historiale*, compiled about 1250, he quotes it up to *oraverat* at 11.67 (in the numeration of the *ed. princ.*, Strasbourg 1473; 9.67 in the Augsburg ed. of 1474, 10.67 in the Venice ed. of 1494 and the Douai ed. of 1624). An early witness to the chapter, not just the *Vita* but what precedes it, is the later note (s. xiii / xiv) at the end of Cambridge Trin. R 9 17 (819). Like the editions, it has *g[r]ades* and some other readings probably due to Vincent himself: *integre* for *summa integritate*, *in ocio plura* for *plura in otio*, *periit* ⟨*autem*⟩, *cum enim* for *nam cum*, *deficiente aestu* ~. Plainly, though, he used a relative of c: he gives his source as *Tranquillus in cathalogo virorum illustrium* and has *Romanis* for *Germanis*, *xxxvii* for *xxxviii*, *Vesubio*, and *liburnicas pretendisset*.

As I said above, Suetonius cannot have written what I have called the 'tailpiece', from *Hic in his libris* to the end. Plainly it was not added until someone adapted the *Vita* for use as an introduction to the *Natural history*. The extant *Vita* is not the only place, however, where its last sentence appears. After the *Natural history* the manuscript a (Vienna

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35 The *Vita* 'Non est Suetonii,' said Casaubon (1610) 'quod … dictio clare arguit', but I have quoted Burman's reply (n. 11). Similarly Roth (1858) lxxxix 'sermo non abhorret'. 'On the score of diction,' says Baldwin (1983) 404 'there is nothing to confirm or exclude Suetonian authorship'. Howard and Jackson (1922) exclude the *Vita*.

36 Munk Olsen (1982–1985) I.429 no. 108 (and see 486 no. 155, Paris B.N. Lat. 10310), II.24 no. 103 (and see 48 no. 90, Montpellier 113).

37 Only manuscripts of the full text include it, and none antedates the 1370s.

38 Reifferscheid (1860) 369, though I either do not understand or do not believe his argument about the title: 'quae ibi usurpatur non tam librum describendi quam citandi ratio, cum antiquioribus temporibus usitata postea in desuetudinem abiisset, non inculta aetate vitam Plini de Suetoni libro sublatam esse certissimum est indicium'.

9–10, s. xii) has medical excerpts from Isidore and elsewhere, and after these, on the back of its last leaf, it has a *summarium*, not the same one as the family of d. Books 3–6, for instance, are summed up as follows in d:

> Tertius continet de primo et secundo Europae sinu
> Quartus continet de tertio et quarto Europae sinu
> Quintus continet de Africa
> Sextus continet de Asia

According to a, on the other hand, *Libro .iii. continentur situs gentes maria oppida portus montes flumina mensurae populi qui sunt aut fuerunt*, and exactly the same description is given of Books 4, 5, and 6, with no indication that they cover different parts of the world. Similarly, in Book 8, which for d *continet maiorum animalium genera et naturas et aliqua ex eis medicamenta*, for a *continentur de elefantis, de ascensu eorum*. The most interesting difference, however, concerns Book 1:

> Primus continet tantum capitula cum auctoribus ceterorum xxxvi sequentium librorum d
> Primus liber quasi index xxxvi in libros sequentium consummationem totius operis et species continet titulorum a

The formulation in a is identical with the last sentence of the *Vita* except that here it omits *autem* after *Primus* and *est* after *index*. Did the medical section of a once precede the *Natural history*, as in the probably related manuscript recorded in the 11th century at Cluny, 'Volumen in quo continetur Plinius de physica, idem de naturis rerum',[39] or did someone use the blank page for an extemporization or a piece found in another manuscript? If the *summarium* was not extemporized in a itself, did *Primus liber* … *species titulorum* migrate there from the *Vita* or the reverse? It may be no accident that in the oldest witness to the *Vita*, E, *autem* was added above the line.

I end where I began, with the manuscript used by Vinetus before Dalecampius, which belonged to the college founded at Toulouse in 1457 by Pierre de Foix (Petrus de Fuxo, archbishop of Arles 1450–1463).[40] On instructions from the pope, this cardinal took over in 1429 what remained of the papal library at Peñíscola, which he transferred in 1433 to Avignon; he intended that his college should receive it together with new acquisitions of his own, and on his death in 1464 his estate included manuscripts, though they may not all have gone to the college; what

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39 See n. 18 above.

40 Eubel (1914) 5, 93.

still remained of the library at the college was acquired in 1680–1683 by Colbert, finance minister to Louis XIV and a notable collector, whose manuscripts are now in the Bibliothèque Nationale. Inventories survive from all stages of this process: six of c. 1405–1423 (Bup, Bot, Bal, Pa, Pb, Pc), one of 1429 (Fa), one of 1466 (Fb), and two of 1680–1683.[41] At all stages except the last, copies of the *Natural history* are registered. As various inventories of papal libraries other than the Vatican have been published in various places, I will assemble here all the entries for the *Natural history* that occur in them. The inventories that antedate those from Peñíscola are one of 1311 from Perugia (Pe), two of 1327 and 1339 from Assisi (Io, Be), and two of 1369 and 1375 from Avignon (Ur, Gr);[42] so far as I am aware, no copy of Pliny occurs in the Avignon inventories of 1407, 1411, or 1594, unless he lurks under such vague entries as *philosophia naturalis* or *quidam liber naturalium*.[43] I include copies that editors have indexed under Suetonius because the entries in question identify the contents from the title of the *Vita*. The second entry comes not from an inventory but from the accounts of Pope John XXII at Avignon in 1317.[44]

1311

Pe 296 Item unum grossum librum de nota satis subtili scriptum in cartis edinis qui intitulatur in principio *Vita Plinii ex catalogo virorum illustrium Tranquilli*, et incipit ante capitula in secundo folio *ille fecit quem suis* [*Praef.* 27] et finit in penultimo *omnes gemme* [37.195], et est in tabulis cohopertis de corio albo sine clausoriis

1317

Item libris Plinii

1327

Io 123 Liber Gaii Plinii, extimationis IIII flor.

1339

Be 37 Item librum vite primi cathalogo illustrorum virorum Tranquilli cum postibus et corio albo[45]

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41 Pa was edited by Faucon (1886–1887), the others up to 1466 by Jullien de Pommerol and Monfrin (1991), and those of 1680–1683 by Delisle (1868) 486–509. On Pierre de Foix see Jullien de Pommerol and Monfrin op. cit. 1 xx–xxii, 49–55, and Baron (1920).

42 For Pe Ur Gr see Ehrle (1890); for Io Be, Ehrle (1885) and Pelzer (1947).

43 For the inventory of 1407 see Galindo Romeo (1929); for the others, Maier (1977).

44 Faucon (1886–1887) II.26 = Ehrle (1890) 147 = Schäfer (1911) 265.

45 So Pelzer (1947) 46; Ehrle (1885) 337 had given '… primi (?) sive cathalogo (?) …'.

1369

Ur 696 Item Plinius de natura ystoriarum mundi, coopertus corio rubeo, qui incipit in secundo folio *turitatem* [*Praef.* 27] et finit in penultimo folio *vel oculo he* [37.187]

Ur 800 Item Plinius de istoria naturali, coopertus corio rubeo, qui incipit in secundo folio *ne affricanum* [*Praef.* 30] et finit in penultimo folio *coloribus* [37.171 / 178?]

Ur 802 Item Plinius, coopertus corio viridi, qui incipit in secundo folio post tabulam *ciam* [?] et finit in penultimo folio *luctosior* [37.197 *lucrosior*]

Ur 967 Item Plinius, coopertus corio rubeo, qui incipit in secundo folio *horis* [*Praef.* 18] et finit in penultimo folio *gema* [37.196]

1375

Gr 837 Item in volumine signato per CCCXXXVI libri Plinii Secundi de naturali historia

Gr 838 Item in volumine signato per CCCXXXVII libri Plinii Secundi de naturis rerum seu de naturali historia

Gr 839 Item in volumine signato per CCCXXXVIII libri Plinii Secundi de naturali historia

Gr 840 Item in volumine signato per CCCXXXIX libri Plinii Secundi de naturali historia

c. 1405–1408

Bup 361 Item Plinius in pergameno cum postibus et corio viridi in magna forma

Bup 362 Item alius Plinius in pergameno cum postibus et corio rubeo

Bup 363 Item alius Plinius in pergameno cum postibus et corio rubeo quasi antiquo

1409

Bot 6 Item vita Plinii et cathalogus virorum illustrium Tranquilli in pargameno cum postibus cohopertis de corio rubeo antiquo

Bot 80 Item vita Plinii cum catalogo virorum illustrium in magna forma in pargameno cum postibus viridis

c. 1409

Bal 32 Item Plinius naturalis historie in pulcra littera copertus de rubeo

c. 1412–1415

Pa 773 Item Plinius in uno volumine

Pa 774 Item prima pars Plinii

This copy, tentatively interpreted by Manitius (1932) 1099 and (1935) 144 as a substantial portion of Suetonius's *Viri illustres*, was correctly diagnosed by Pelzer (1947) 46 n. 1, 81 ('... primi (lege Plinii) ...'), but has resurfaced in Vacher (1993) lx as probably a copy of the late-antique *De viris illustribus* with an ascription to Suetonius.

Pa 775 Item secunda pars Plinii
Pa 776 Item Plinius in uno volumine

1423 *libraria*

Pb 1368 Item Plinius in pergameno cum pulcra littera et copertis de corio rubeo, et incipit in primo colondello secundi folii *oris vidimus* [*Praef.* 18] et finit in eodem *invenies* [*Praef.* 24]

1423 *studium*

Pc 398 Plinius, incipit in rubeo in prima columna *Incipit prefacio* et finit in sequenti columna *habent nec ulli* [*Praef.* 11]
Pc 399 Item alius Plinius in duobus voluminibus, quorum primum incipit in littera nigra *Plinius Secundus* et finit in secunda columna *imperium trium* [*Praef.* 2–3]
Pc 400 Item secundum, incipit in prima columna de littera rubea *Gaii Plinii Secundi* et finit in sequenti columna *modo tenebris* [18.4]
Pc 401 Item alius Plinius in uno volumine, incipit post tabulam in prima columna *Capitulum primum* et finit in eadem columna *supra omnem impuden* [2.17]

1429

Fa 559 Item Plinius Secundus magna forma copertus de viridi

1466

Fb 1 Primo liber secundus Plinii Naturalis hystorie, qui finit in prima pagina *nec sibi* [2.27]
Fb 2 Item liber primus Plinii Naturalis hystorie, finit in fine primi folii *magis providentia* [?][46]
Fb 3 Item liber primus Plinii cum sua tabula, finit in prima pagina *Arronsio Senoso* [1.3 auctores]

Obviously, many of these 31 entries were describing the same copies. Doubtless Pe 296 = Io 123 = Be 37; what remained of the collection at Assisi, however, seems never to have entered the collection at Avignon but to have been shared out in 1367–1370 by Pope Urban V, during his abortive attempt at restoring the papacy to Rome, among churches and religious houses there.[47] Pa 773–776 = Pc 398–401, and presumably Gr 837–840, in whatever order, = Ur 696, 800, 802, 967, one of which should have been the copy that John XXII acquired in 1317; he acquired it

[46] Neither these words nor any closer to them than *magis pudenda* (2.16) occur in the *Natural history* or in any of the material that sometimes introduces it: Plin. *Ep.* 3.5, 6.16, extracts from Jerome's *Chronicle*, the *Brevis annotatio de duobus Pliniis*.

[47] Ehrle (1913) 341–351.

from Niccolò da Prato, bishop of Spoleto 1299–1303 and cardinal bishop of Ostia 1303–1321.[48] This seems to have been the copy that enabled Petrarch at Avignon in 1343 to draw on the *Natural history* in Books 1–2 of his *Rerum memorandarum libri*; the phrases that he quotes from the *Vita* at 1.19.1–2 show that he read *quis*, *Romanis*, and *xxxvii*, with c and its relatives.[49] Certainly or probably, Ur 802 = Bup 361 = Bot 80 = Pc 401 (since -*ciam* would run on from *supra omnem impuden*-) = Fa 559, Ur 967 = Bal 32 = Pb 1368, Bup 363 = Bot 6. I have identified Ur 696 as Escorial V I 14, Ur 967 as Escorial Q I 4;[50] the former seems likely to have been Pc 398, because the only extant copy known to me that opens with *Incipit prefacio* is e, and up to 21.155 Escorial V I 14, which has lost its first leaf, descends from it.[51] Similarly, Pc 398 should be Gr 838, because e has *de naturis rerum* in its title; but Petrarch's copy must have been different, because in the *Vita* e has *quo*, *Germanis*, and *xxxviii*. The equivalences that I have accepted still leave anything from four to twelve copies. It is hard to say which, if any, has the best chance of being the one that supplied Vinetus with the *Vita*.

Dalecampius (1587) cites variants in the margin and gives a list of the abbreviations that he uses for referring to their sources.[52] He does not describe the manuscript, and his citations from it are limited to 37.65–197; at least, I ran an eye down the margin up to the end of Book 5 and in Books 14, 21, 25–26, and 31–36, without spotting 'Fux.' anywhere. Later I inspected his collations, preserved in Paris B.N. Rés. S 125–126 (Lyon 1563).[53] On 37.65 *austeritas* he writes '*autoritas* Fuxensis bibliothecae tholosanae codex', as though he had not cited it before. In the collations his 'M.' ('manuscriptum vel manuscripta exemplaria') first appears as 'm. nostrum', and he notes the omission of most passages missing from Voss. Lat. F 1 and its relatives, but his terminology varies: on 6.148–152 he speaks of 'm.', on 21.161–22.65 of 'utrumque meum

[48] On Niccolò da Prato, the dedicatee of Nicholas Trevet's commentary on Seneca's tragedies, see Billanovich (1989) 87–98, Innocenti (2001), Fossati (2007) 247 n. 10.

[49] Billanovich (1945) xcviii–cii discusses Petrarch's access to the *Natural history*. As he read *summa integritate* rather than *integre*, he was not following Vincent of Beauvais.

[50] Reeve (2006) 157, 161.

[51] When I gave proof of the relationship, (2006) 163, I mentioned that alongside 20.250 *cucumeris* e has in the margin the note *hic incipit xxi^{us} quaternus et ultimus*, which I thought might turn out to be true of Esc. V I 14. It is: quire 20 ends with *cu*- and the catchword -*cumeris*, and quire 21 begins with -*cumeris*.

[52] His sources were most fully discussed by Urlichs (1866) 355–359.

[53] The collations are illustrated by Labarre (1973) 466 and Walter (1996) 196 fig. 4.

exemplar manuscriptum', on 23.37–54, 27.113–124, and 28.39–51, of his 'exemplaria', and on 25.117–141 and 34.83–96 of a single 'exemplar'. Whether 'both' means his own manuscript and the Fuxensis or two manuscripts of his own I see no way of determining.

From Vinetus, however, one learns that in the *Vita* the Fuxensis had *novem menses* (the reading of Eehalc), *Romanis* (the reading of c), *xxxvii voluminibus* (also the reading of c) with *xxxviii* in the margin, *Petiit Gades*, and *Campaniae* with *Germaniae* in the margin. If it survives, these details should be enough for identifying it. If it does not, editors at least need shed no tears.

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